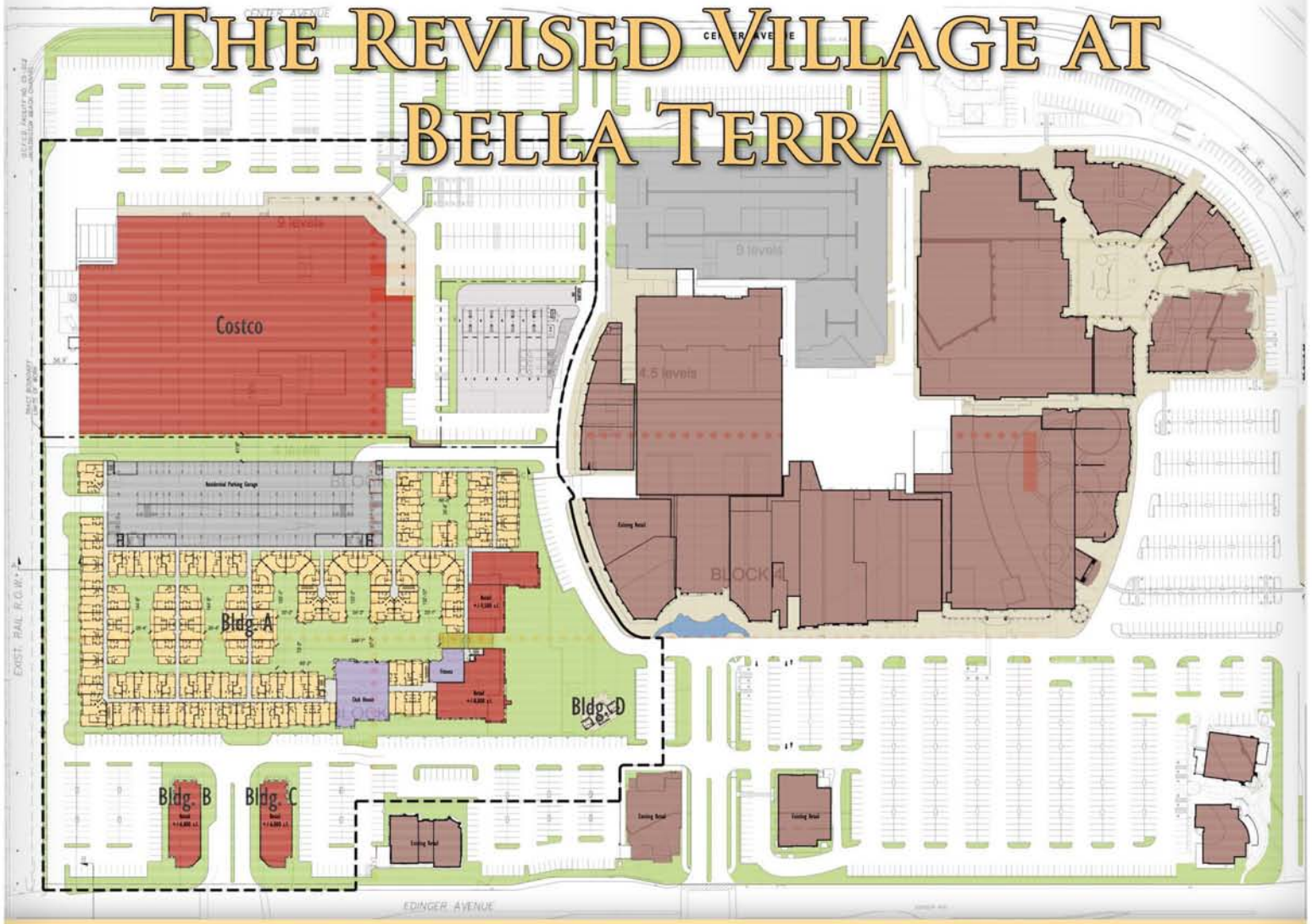
The Revised Village at Bella Terra



Draft Addendum to The Village at Bella Terra Environmental Impact Report

SCH No. 2008031066 | EIR No. 07-03

August 2010

Prepared for:

City of Huntington Beach | Planning Department
2000 Main Street, Huntington Beach, California 92648

Prepared by:

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CITY OF HUNTINGTON BEACH

THE REVISED VILLAGE AT BELLA TERRA/COSTCO

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CHAPTER 1 Introduction

This document is an Addendum to The Village at Bella Terra Final EIR to address proposed changes to the project that was previously approved. The Final EIR (dated October 2008) is comprised of the Draft EIR and Appendices (dated July 2008), Changes to the Draft EIR, and Responses to Comments. The Final EIR was certified by the City of Huntington Beach Planning Commission on October 14, 2008, and the legislative acts were approved by the City of Huntington Beach City Council on November 17, 2008.

Although discussed in detail in Chapter 2 (Project Description), the previous project analyzed in The Village at Bella Terra EIR (previous project or previous EIR) consisted of General Plan Amendment No. 07-01 (GPA) and Zoning Text Amendment No. 07-02 (ZTA) which was intended to facilitate development of a mixed-use project. Two development scenarios, referred to as Options 1 and 2, were analyzed in the previous EIR; Option 1 was ultimately approved. Option 1 allowed horizontally integrated mixed-uses and regulated such issues as density, height, and floor area ratio (FAR). Option 1 was approved for the maximum development of 713 residential units and 138,085 square feet (sf) of commercial uses.

The currently proposed project (revised project) consists of a revised GPA and ZTA that would result in the realignment of the boundary line that was previously established between General Plan Subareas 5A and 5B (also identified as Areas A and B of Specific Plan No. 13 [SP-13]), and would transfer approximately 5.45 acres from Area B to Area A. This revised GPA would result in an increase in area and use of commercial-only development within Area A and a reduction in commercial area and residential units within Area B. The associated ZTA would also permit big box commercial and fuel station uses and would establish associated design and development standards for such uses within Area A. The Area B mixed-use overlay would remain the same as previously analyzed but would reduce the level of development.

The revised project would be developed in two phases beginning with the construction of a 154,113 sf Costco building, including an ancillary tire sales/installation center and sixteen-pump vehicle fueling facility, for Costco membership use only. The Costco center would replace the existing vacant Mervyn's building and an attached retail building. The second phase of the revised project would include a mixed-use project with 468 dwelling units, including 13,500 sf of residential amenities such as a recreation room, fitness center, leasing office, and lobby area, as well as 30,000 sf of commercial retail space. Aside from the reduction in the maximum amount of permitted residential and commercial mixed-uses, all other aspects of the conceptual plan are identical to that analyzed in the previous EIR.

According to CEQA Guidelines Section 15164(a), "The lead agency or responsible agency shall prepare an addendum to a previously certified EIR if some changes or additions are necessary but none of the conditions described in Section 15162 calling for preparation for a subsequent EIR have occurred."

CEQA Guidelines Section 15162(a) states in part:

> … when an EIR has been certified or a negative declaration adopted for a project, no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:
>
> (1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;
>
> (2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or
>
> (3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following: …

Regarding CEQA Guidelines Section 15162(a)(1), the proposed changes to the previously approved project, discussed in more detail in the sections to follow, are not considered to be substantial such that major revisions of the previous EIR would be required. Additionally, no new significant environmental effects or substantial increases in the severity of previously identified significant impacts will occur as a result of the revised project. On the whole, the revised project is a reduction in the density of the previously approved project and the continuation of the long-standing retail uses at the project site. Even with the change to less mixed-uses on the site and the continuation of more traditional, regional-serving retail uses, the revised project results in a decrease in development on site and the level of environmental impact typically experiences a similar reduction.

Although not required by the CEQA Guidelines, each environmental issue area that was analyzed in previous EIR is discussed in the following chapters. Impacts to some issue areas will not be different from the previously analyzed project and are not discussed in great detail but a brief comparison of the potential impacts of the previous project and the revised project is provided. For environmental issue areas where a change in impact level could occur, a full analysis of the revised project is provided.

Regarding CEQA Guidelines Section 15162(a)(2), there are no substantial changes with respect to the circumstances under which the project will be undertaken. Much like the previous project, the revised project will be developed in phases so as to reduce potential impacts across the site and maintain as much functionality as possible. Additionally, this will ensure that proper circulation on surrounding roadways and at the adjacent Bella Terra mall will not be disrupted during construction. As discussed in the following sections, baseline conditions from the time of the previous analysis have not changed substantially as the project site has been an underutilized retail area for many years. All mitigation measures, Code requirements, and project requirements required under the previous project will be required of the revised project to ensure that impacts are reduced to the greatest extent feasible.

Regarding CEQA Guidelines Section 15162(a)(3), there is no new information of substantial importance that could have been known at the time of certification of the previous EIR. As discussed above and in future sections, the existing or baseline conditions for the revised project are substantially similar to that of the previous project. For some issue areas, new regulatory requirements have been adopted since the

time of the previous EIR certification. Where appropriate, these new regulations have been addressed in this Addendum and no new or additional impacts have been identified. However, there is no new information regarding the previously approved project, community issues, or environmental issues that could have been known previously.

As determined by the current analysis of the revised project, the proposed changes to the previous project will not result in new or exacerbated significant environmental impacts. Furthermore, while some refinements or enhancements have been made to a few mitigation measures to ensure the most current regulations and technology, the proposed changes do not constitute new or substitute mitigation and would not alter the findings of significance on the previous EIR. In fact, many of the previously identified impacts are reduced as a result of the proposed changes reflected in the revised project. Finally, the proposed changes do not meet the criteria of CEQA Guidelines Section 15162(a) requiring a Supplemental or Subsequent EIR. As such, an Addendum has been determined to be the appropriate environmental document to address the changes proposed in the revised project. The revised project, as discussed in this Addendum, will not result in new or exacerbated significant impacts to the environment.

1.1 INTENDED USES OF THE EIR

This Addendum to The Village at Bella Terra EIR is intended to provide decision-makers and the public with information that enables them to consider the environmental consequences of the revised project. As with the previous EIR, this Addendum identifies potentially significant or significant environmental impacts, as well as ways in which those impacts can be reduced to less-than-significant levels, typically through the implementation of mitigation measures, Code requirements, or other project requirements. In a practical sense, as with all EIRs, this Addendum functions as a technique for fact-finding, allowing an applicant, concerned citizens, and agency staff an opportunity to collectively review and evaluate impacts of the revised project (especially with respect to the previously approved project) through a process of full disclosure.

To gain the most value from this report, certain key points should be kept in mind:

- This report should be used as a tool to give the reader an overview of the possible ramifications of the proposed project.
- A specific environmental impact is not necessarily irreversible or permanent. Most impacts, particularly in urban, more developed areas, can be wholly or partially mitigated by incorporating conditions of approval and/or changes recommended in this report during the design and construction phases of project development.
- This report, while a summary of facts, reflects the professional judgment of the authors. The EIR was prepared by consultants retained by the City and by City staff, and was subject to the independent review and judgment of the City. The City independently reviewed and analyzed the EIR for the proposed project, and the EIR reflects the independent judgment of the City.

1.2 SCOPE OF THE EIR

This Addendum provides an overview of the potential environmental impacts of the revised project, as well as a comparison of the level of environmental impact relative to the previously approved project. The scope of this Addendum includes environmental issue areas previously identified by the City of Huntington Beach to be appropriate during preparation of The Village at Bella Terra EIR. However, as discussed briefly above, for many of the previously evaluated environmental issue areas, potential impacts of the revised project do not differ from the previous project and analysis. These issue areas are discussed briefly in Chapter 4 (Resource Areas Not Requiring Analysis). Issue areas for which additional analysis was appropriate are subsequently provided and include:

- Aesthetics
- Air Quality
- Hazards and Hazardous Materials
- Land Use and Planning
- Noise
- Transportation/Traffic

1.3 PROJECT SPONSORS AND CONTACT PERSONS

The City of Huntington Beach is the lead agency for the preparation of this EIR. The Applicant for the proposed project is BTDJM Phase II Associates, LLC. PBS&J is the environmental consultant to the City and the principal preparer of this EIR. Key contact persons are as follows:

Lead Agency:	City of Huntington Beach Department of Planning 2000 Main Street Huntington Beach, CA 92648
Lead Agency Contact:	Jane James, Senior Planner (714) 536-5596 jjames@surfcity-hb.org
Project Applicant:	BTDJM Phase II Associates, LLC 922 Laguna Street Santa Barbara, CA 93101
EIR Consultant:	PBS&J 12301 Wilshire Boulevard, Suite 430 Los Angeles, CA 90025

1.4 SUMMARY AND COMPARISON OF IMPACTS

Table 1-1 (Summary and Comparison of Impacts Associated with the Previous and Revised Projects) below provides a summary of the impacts and the level of significance for each impact associated with both the previous and revised projects.

Applicable mitigation measures are listed with the impact for which the measures are necessary. As part of the preparation of the Addendum, primarily due to the format of the document, the numbering of mitigation measures has changed from the previous EIR, as shown in this Addendum. For the preparation of Table 1-1, it is assumed that the mitigation measure numbers identified with each impact reference the respective document (i.e., previous EIR or this Addendum). A comprehensive comparison of mitigation measures required for both the previous and revised projects, including changes to numbering, is provided in Appendix A (Revised Project Mitigation Monitoring and Reporting Program).

Table 1-1 Summary and Comparison of Impacts Associated with the Previous and Revised Projects

Previous Project	*Revised Project*
AESTHETICS	
■ Implementation of the previous project would not have an adverse effect on a scenic vista and would result in a less-than-significant impact. ■ Implementation of the previous project would not degrade the existing visual character or quality of the site and its surroundings, and would result in a less-than-significant impact. ■ Implementation of the previous project would introduce new sources of light and glare into the project vicinity however impacts would be less than significant with incorporation of mitigation. Mitigation measure MM4.1-1 was required.	■ The revised project would not result in a substantial adverse effect on a scenic vista and would result in a less-than-significant impact. ■ The revised project would serve to improve the aesthetic character of the present project site by removing the outdated vacant commercial structures. The revised project would not substantially degrade the existing visual character or quality of the site and its surroundings from that previously analyzed, and would result in a less-than-significant impact. ■ Light and glare impacts would not be increased over that anticipated previously, and the revised project would result in a less-than-significant impact. Mitigation measure MM4.4-1 would remain applicable.
AIR QUALITY	
■ Implementation of the previous project would provide new sources of regional air emissions, but would not impair implementation of the Air Quality Management Plan, resulting in a less-than-significant impact. ■ Peak construction activities associated with the previous project could generate emissions that exceed SCAQMD thresholds. Code requirements CR4.2-1 through CR4.2-5 and Mitigation measure MM4.2-1 and MM4.2-2 were identified to reduce this impact, but not to levels below significance. Impacts would be significant and unavoidable. ■ Daily operation of the previous project could generate emissions that exceed SCAQMD thresholds. Mitigation measure MM4.2-3 was identified to reduce this impact, but not to levels below significance. Impacts would be significant and unavoidable. ■ Implementation of the previous project would generate increased local traffic volumes, but would not cause localized CO concentrations at nearby intersections to exceed national or state standards, and would result in a less-than-significant impact. ■ Construction activities associated with implementation of previous project would generate emissions that could result in an exceedance of localized significance thresholds for CO, NO_2, PM_{10}, and $PM_{2.5}$ established by the SCAQMD, and, therefore, could expose sensitive receptors to substantial pollutant concentrations. Code requirements CR4.2-1 through CR4.2-5 and mitigation measures MM4.2-1 and MM4.2-2 were identified to reduce this impact, but not to levels below significance. Impacts would be significant and unavoidable.	■ Implementation of the revised project would provide new sources of regional air emissions, but would not impair implementation of the Air Quality Management Plan, resulting in a less-than-significant impact. ■ Peak construction activities associated with the revised project could generate emissions that exceed SCAQMD thresholds. Code requirements CR4.2-1 through CR4.2-5 and project design features were identified to reduce this impact to a less-than-significant level. Incorporation of mitigation measures MM4.2-1 and MM4.2-2 would further reduce the less-than-significant impact level. ■ Daily operation of the revised project could generate emissions that exceed SCAQMD thresholds. Mitigation measure MM4.2-3 and MM4.2-4 as well as enhanced mitigation measures MM4.2-5 through MM4.2-8, would reduce this impact, but not to levels below significance. Impacts would be significant and unavoidable. ■ Implementation of the revised project would generate increased local traffic volumes, but would not cause localized CO concentrations at nearby intersections to exceed national or state standards. This impact would be less than significant. ■ Construction activities associated with implementation of the revised project could generate emissions that could result in an exceedance of localized significance thresholds for CO, NO_2, PM_{10}, and $PM_{2.5}$ established by the SCAQMD. With the incorporation of code requirements CR4.2-1 through CR4.2-5, project design features, and mitigation measures MM4.2-1 and MM4.2-2, the revised project would result in a less-than-significant impact for all pollutants of concern. ■ Operational activities resulting from implementation of the gas station associated with the revised project would generate emissions that could result in unacceptable levels of cancer and health risks. Modeling for impacts from benzene emissions indicate that the associated health and cancer risks resulting from the revised project are less than significant.

Table 1-1 Summary and Comparison of Impacts Associated with the Previous and Revised Projects

Previous Project	*Revised Project*
Greenhouse Gas Emissions	**Greenhouse Gas Emissions**
■ The project would be required to comply with the following as identified in Table 4.2-21 and Table 4.2-22 of the previous EIR: CAPCOA Mitigation Measures, California Climate Action Taskforce (CAT) Recommendations, and California Attorney General Strategies. Impacts would be reduced to a less-than-significant level.	■ Implementation of the revised project would have the potential to contribute substantial emissions of greenhouse gases. With the incorporation of mitigation measures MM4.2-6 through MM4.2-14, impacts of the revised project will result in a less-than-significant impact. ■ Revised project emissions of greenhouse gases would have the potential to conflict with the implementation of AB 32. With the incorporation of mitigation measures MM4.2-6 through MM4.2-14, impacts of the revised project will be less than significant.
HAZARDS AND HAZARDOUS MATERIALS	
■ Implementation of the previous project could involve the routine use, storage, transport, or disposal of hazardous materials. Compliance with local, state, and federal regulations the previous project would result in a less than significant hazards impact due to the storage, transport and disposal of hazardous materials. ■ Implementation of the previous project could create a potential significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Mitigation measures MM4.6-1 and MM4.6-2 have been identified to reduce this impact to a less-than-significant level. ■ Implementation of the previous project would result in the handling of acutely hazardous materials, substances, or waste within ¼ mile of a proposed school, but would not create a risk to human health from such activities, resulting in a less-than-significant impact. Mitigation measure MM4.6-1 would help to reduce this impact. ■ Implementation of the previous project would place the project site within a listed hazardous materials site compiled pursuant to Government Code Section 65962.5. Mitigation measures MM4.6-1 through MM4.6-3 have been identified to reduce this impact to a less-than-significant level. ■ Implementation of the previous project would locate the project site within a Height Restriction Zone for the Joint Forces Training Center. However, building heights would be under the FAA's 200-foot restriction and impacts would be less than significant.	■ Implementation of the revised project would involve the routine use, storage, transport, and disposal of hazardous materials, but no significant hazard to the public or the environment is anticipated to occur. Compliance with local, state, and federal regulations would ensure that this impact would remain less than significant. ■ Implementation of the revised project could create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Mitigation measures MM4.3-1 and MM4.3-2 have been identified to reduce this impact to a less-than-significant level. ■ Implementation of the revised project would result in the handling of acutely hazardous materials, substances, or waste within ¼ mile of a proposed school, but would not create a risk to human health from such activities, resulting in a less-than-significant impact. Mitigation measure MM4.3-1 would help to reduce this impact. ■ Implementation of the revised project would place the project site within a listed hazardous materials site compiled pursuant to Government Code Section 65962.5. Mitigation measures MM4.3-1 through MM4.3-3 have been identified to reduce this impact to a less-than-significant level. ■ Implementation of the revised project would locate the project site within a Height Restriction Zone for the Joint Forces Training Center. However, building heights would be under the FAA's 200-foot restriction and impacts would be less than significant.
LAND USE AND PLANNING	
■ The previous project would redesignate the site to allow a higher density of mixed-uses, and implementation of the GPA/ZTA would not conflict with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. The previous project would result in a less-than-significant impact to land use.	■ The revised project consists of a new General Plan Amendment (GPA) and Zoning Text Amendment (ZTA) that would transfer approximately 5.45 acres from Area B to Area A in Specific Plan No. 13. Implementation of the revised project would not conflict with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. The revised project would result in a less-than-significant impact.

Table 1-1 Summary and Comparison of Impacts Associated with the Previous and Revised Projects

Previous Project	*Revised Project*
NOISE	
■ Construction activities associated with the previous project would not exceed the standards established in the Huntington Beach Municipal Code. Operation of the previous project would not generate noise levels in excess of standards established by the City. Mitigation measures MM4.9-1 through MM4.9-3 and compliance with the City of Huntington Beach Noise Ordinance have been identified to reduce this impact to a less-than-significant level.	■ Construction activities associated with the revised project would not exceed the standards established in the Huntington Beach Municipal Code. Operation of the revised project would not result in noise levels in excess of standards established by the City. Mitigation measures MM4.5-1 through MM4.5-3 have been identified to reduce this impact to a less-than-significant level.
■ Construction and operation activities associated with the previous project would not generate or expose persons off site to excessive groundborne vibration, resulting in a less-than-significant impact.	■ Construction and operation activities associated with the revised project would not generate or expose persons off site to excessive additional groundborne vibration. This impact would be less than significant.
■ The previous project would generate increased local traffic volumes, but would not cause a substantial permanent increase in ambient noise levels, resulting in a less-than-significant impact.	■ The revised project would result in a change in PM peak hour local traffic patterns, but would not cause a substantial permanent increase in ambient noise levels. This impact would be less than significant.
■ Increased human activity associated with operation of the previous project would not cause a substantial permanent increase in ambient noise levels, resulting in a less-than-significant impact.	■ Increased human activity associated with operation of the revised project would not cause a substantial permanent increase in ambient noise levels. This impact would be less than significant.
■ Construction activities associated with the previous project would result in a substantial temporary or periodic increase in ambient noise levels. Mitigation measures MM4.9-1 and MM4.9-2 would reduce this impact, but not to a less-than-significant level, therefore resulting in a significant and unavoidable impact	■ Construction activities associated with the revised project would result in additional substantial temporary or periodic increases in ambient noise levels. Implementation of mitigation measures MM4.5-1 and MM4.5-2 would reduce this impact, but not to a less-than-significant level. Therefore, this impact would remain significant and unavoidable.

Table 1-1 Summary and Comparison of Impacts Associated with the Previous and Revised Projects

Previous Project	*Revised Project*
TRANSPORTATION/TRAFFIC	
■ Construction of the previous project would not cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system, therefore resulting in a less-than-significant impact. ■ Under Year 2014 conditions, operation of the previous project could cause an increase in traffic which is substantial in relation to the forecasted traffic load and capacity of the street system. Mitigation measure MM4.13-1 was identified to reduce this impact, but not to a less-than-significant level, therefore resulting in a significant and unavoidable impact. ■ Under Year 2030 Conditions, operation of the previous project could cause an increase in traffic which is substantial in relation to the forecasted traffic load and capacity of the street system. Mitigation measure MM4.13-1 was identified to reduce this impact, but not to less-than-significant levels, therefore resulting in a significant and unavoidable impact. ■ Implementation of the previous project would not exceed standards established by the Orange County Transportation Authority, resulting in a less-than-significant impact. ■ Implementation of the previous project would not result in a change in air traffic patterns, thereby resulting in a less-than-significant impact. ■ Implementation of the previous project would not substantially increase roadway hazards. Code requirements CR4.13-1 and CR4.13-2 were identified to reduce this impact to a less-than-significant level. ■ Implementation of the previous project would not result in inadequate emergency access, thereby resulting in a less-than-significant impact. ■ Implementation of the previous project would not result in inadequate parking capacity, thereby resulting in a less-than-significant impact. ■ Implementation of the previous project would not conflict with adopted policies supporting alternative transportation, thereby resulting in a less-than-significant impact.	■ Construction of the revised project would not cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. This impact is less than significant. ■ Under Year 2014 conditions, operation of revised project would not cause a substantial increase in traffic beyond that which was previously analyzed. The revised project would result in an increase in traffic similar to the previous project, which is substantial in relation to the forecasted traffic load and capacity of the street system. Mitigation measure MM4.5-1 has been identified to reduce this impact but not to less-than-significant levels. This impact would remain significant and unavoidable. ■ Under Year 2030 Conditions, operation of revised project would not cause a substantial increase in traffic beyond that which was analyzed in the previous EIR. The revised project would result in the same increase in traffic, which is substantial in relation to the forecasted traffic load and capacity of the street system. Mitigation measure MM4.5-1 has been identified to reduce this impact but not to less-than-significant levels. This impact would remain significant and unavoidable. ■ Implementation of revised project would not exceed standards established by the Orange County Transportation Authority. This impact would be less than significant. ■ Implementation of the revised project would not result in a change in air traffic patterns. This impact would be less than significant. ■ Implementation of the revised project would not substantially increase roadway hazards. Code requirements CR4.6-1 and CR4.6-2 were identified to reduce this impact to a less-than-significant level. ■ Implementation of the revised project would not result in inadequate emergency access. This impact would be less than significant. ■ Implementation of the revised project would not result in inadequate parking capacity. This impact would be less than significant. ■ Implementation of the revised project would not conflict with adopted policies supporting alternative transportation. This impact would be less than significant.

CHAPTER 2 Project Description

2.1 INTRODUCTION

The revised Village at Bella Terra project (revised project) involves changes in the type and amount of commercial uses permitted on the project site in comparison to The Village at Bella Terra Final EIR (referred to herein as the previous project and/or previous EIR) that was certified in 2008 for the project site. The mixed-use portion of the site (southern) would be reduced from the approved 713 dwelling units and 138,085 square feet (sf) of commercial uses to 468 dwelling units and 30,000 sf of commercial. In addition, a 154,113 sf Costco, including an ancillary tire sales/installation center and gas station for use by Costco costumers is proposed on the northern portion of the site.

2.2 PROJECT LOCATION

The revised project is located at 7777 Edinger Ave in the northern portion of the City of Huntington Beach in western Orange County, California. Figure 2-1 (Project Vicinity and Regional Location Map) illustrates the project site's regional location and vicinity. The revised project is located on a previously developed site bordered by Center Avenue to the north, Edinger Avenue to the south, the existing Bella Terra Mall to the east, and the Union Pacific Railroad (UPRR) right-of-way and commercial properties to the west.

2.3 EXISTING PROJECT SITE

Existing characteristics of the project site are summarized in Table 2-1 (Summary of Existing Site Characteristics). Land uses of the project site and surrounding area are shown on Figure 2-2 (Project Site and Surrounding Land Uses). An aerial photo of the site is provided in Figure 2-3 (Aerial Overview).

Table 2-1 Summary of Existing Site Characteristics

Component	*Relevant Information*
Applicant/ Property Owner	BTDJM Phase II Associates, LLC
Assessor's Parcel Number (APN)	142-073-26
Existing Land Use	Vacant Retail/Auto Service
Topography	Flat
Zoning Designation	SP-13 (Specific Plan 13)
General Plan Designations 5A	CR-F2-sp-mu (9)--Commercial Regional-0.5 floor area ratio (FAR)-Specific Plan Overlay-Mixed-Use-1.5 (MU-0.5 (c) and 25 du/acre)
General Plan Designations 5B	CR-F2-sp-mu (F14)— Commercial - Regional -0.2 floor area ratio (FAR)-Specific Plan Overlay-Mixed Use Overlay-1.75 FAR (MU-0.2 FAR (c) and 45 du/acre)

The existing conditions on the project site and in the surrounding area have not changed since certification of the 2008 Final EIR for The Village at Bella Terra (referred to herein as the previous EIR).

The project site is currently developed for retail and auto service uses. A vacant 190,100 sf retail building, formerly occupied by a Montgomery Ward department store, occupies the central portion of the project site. This building was originally an anchor tenant of the former Huntington Center. A vacant 18,600 sf auto repair facility associated with the Montgomery Ward store is located on the southwestern portion of the project site. Both developments were vacated in 2001. In addition, the revised project site also contains a vacant 82,000 sf retail building formerly occupied by Mervyns and an 8,895 sf retail building connected to it in the northeastern portion of the site. These two vacant buildings were not included as part of the previous project. Therefore, although the site is larger than previously analyzed, the characteristics of the overall site have not changed because the Mervyn's and adjacent in-line retail buildings were included as part of the immediate surrounding area in the previous EIR.

The project site and surrounding vicinity is generally flat with no pronounced highs or lows. The site contains minimal landscaping in the form of trees and shrubs.

2.3.1 Surrounding Land Uses

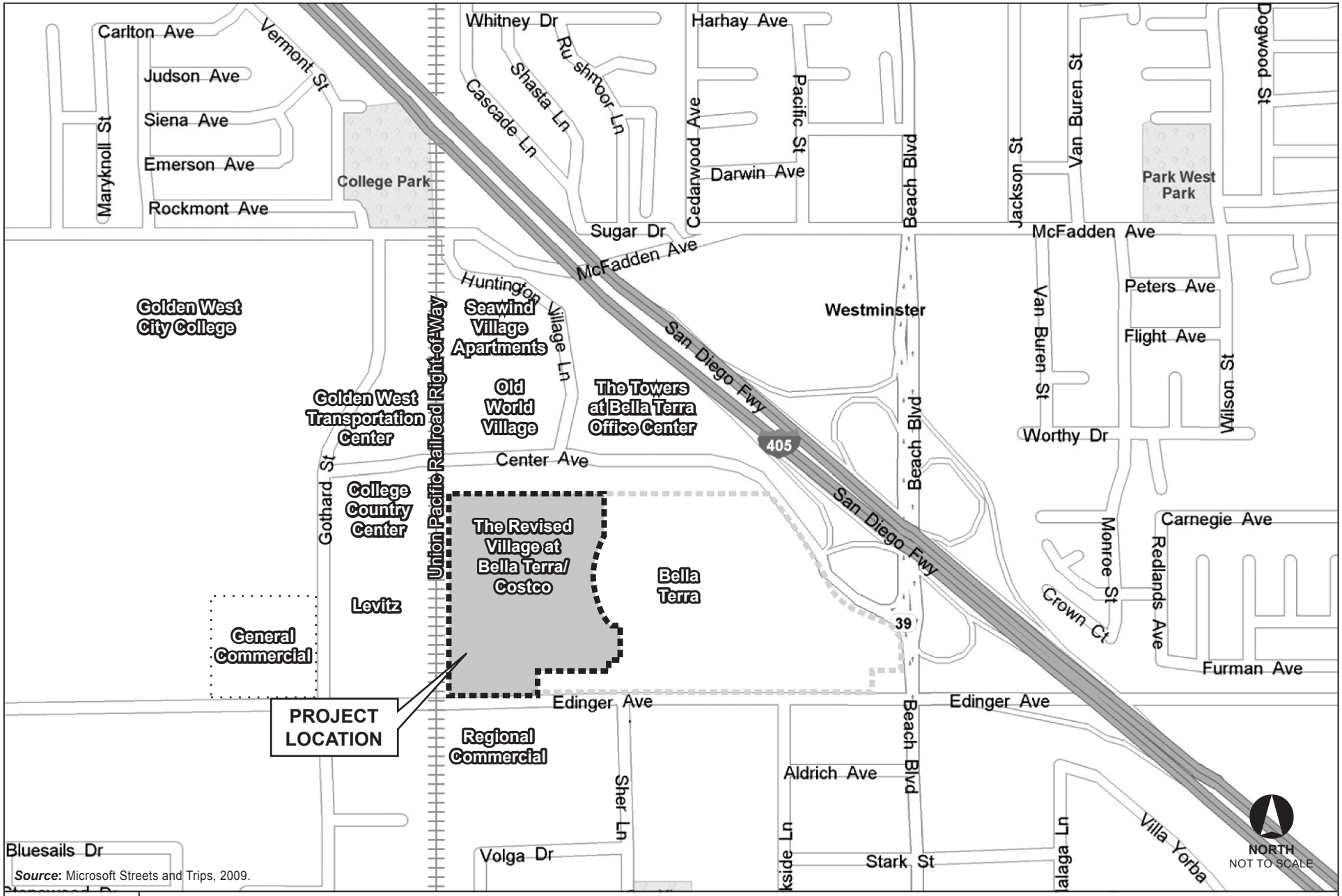
Figure 2-2 (Project Site and Surrounding Land Uses) illustrates the surrounding land uses. A mixture of commercial, office, hotel, and residential uses are located to the north/northeast of the project site. The Old World Village, a Bavarian-themed shopping, dining, and entertainment center, is located north of the project site across Center Avenue. Seawind Village, a multi-family apartment development is further to the north along Huntington Village Lane. The Towers at Bella Terra (formerly called One Pacific Plaza), a 400,000 sf office development, and Hotel Huntington Beach, a 224-room hotel development, are located to the northeast between Center Avenue and I-405. The Bella Terra Mall (Phase I) is located directly adjacent to the project site to the east. The mall contains approximately 694,422 sf of commercial/retail space and is anchored by Kohl's Department Store and a twenty-screen Theater Complex. In addition to the retail establishments, the mall features two public art sculptures, an entertainment plaza with open-air amphitheater, and an open-space plaza.

Commercial and office development is located to the south of the project site across Edinger Avenue, with single-family residential units located further to the south. The College Country Center, a shopping center containing approximately 60,000 square feet of retail and office space, is located to the west of the project site on the opposite side of the UPRR tracks just south of Center Avenue. The RedOak/Amstar project (formerly The Ripcurl project), a mixed-use residential and commercial project containing approximately 385 residential units and 10,000 sf of retail space was approved for the College Country Center site in 2008. A small site with two transmission towers also abuts the northwest corner of the project site. The transmission towers are owned and operated by Southern California Edison (SCE).

***Source*:** Microsoft Streets and Trips, 2006.

FIGURE **2-1**

Project Vicinity and Regional Location Map



***Source*:** Microsoft Streets and Trips, 2009.

FIGURE **2-2**

Revised Project Site and Surrounding Land Uses

FIGURE **2-3**

Aerial Overview

A former Levitz furniture store, consisting of approximately 230,000 sf of retail showroom and distribution space and 331 parking stalls on approximately 11.7 acres, is also located to the west of the project site on the opposite side of the UPRR tracks, immediately south of The RedOak/Amstar proposed project site and along Edinger Avenue. Golden West College, an educational institution consisting of 14,000 students and staff, is located further to the west across Gothard Street.

2.4 PREVIOUS PROJECT BACKGROUND

The previous project consisted of General Plan Amendment No. 07-01 (GPA) and Zoning Text Amendment No. 07-02 (ZTA), approved in 2008, that would facilitate development of a mixed-use project. In particular, the General Plan was originally proposed as follows:

- Allow horizontally integrated mixed-use in addition to the previously allowed vertical mixed-use.
- Increased the allowable residential density from 25 dwelling units per acre (du/ac) up to a maximum 45 du/ac (with limitations specified below).
- Increased the allowable commercial floor area ratio (FAR) from 0.5 to a maximum 0.6 commercial FAR (with limitations specified below).
- Increased the allowable total building FAR from 1.5 to 1.75 maximum FAR.
- Increased the maximum number of stories from four stories to six stories on a majority of the project site, up to a maximum of ten stories on a portion of the site.

The previous EIR analyzed two conceptual development options that would fulfill the GPA:

- **Option 1 (Increased Residential).** Maximum total building area FAR of 1.75, commercial FAR of 0.2, and 45 du/ac, which would permit a maximum of 713 residential units and 138,085 sf of commercial uses. This GPA option represented an overall square footage increase of 172,606, through a decrease in commercial-only building area of 207,128 sf, and an increase of 317 residential units
- **Option 2 (Increased Commercial).** Maximum total building area floor area ratio of 1.75, commercial FAR of 0.6, and 34 du/ac, which would permit a maximum of 538 residential units and 414,255 sf of commercial uses. This GPA option represented an overall square footage increase of 172,606, through an increase in commercial-only building area of 69,042 sf, and an increase of 142 residential units.

These two options represented the overall development scenarios that could satisfy the changes to the General Plan under the previous project; however, only one option—Option 1 (Increased Residential) was ultimately approved. The ultimately approved GPA also increased the maximum number of stories from four stories to six stories. The previous ZTA amended SP-13 to allow residential uses and established residential design and development standards.

The maximum development standards identified for Option 1 represent what is currently allowed on the project site (713 residential units and 138,085 square feet of commercial uses).

2.5 REVISED PROJECT CHARACTERISTICS

2.5.1 Amendments

The revised project consists of a new General Plan Amendment (GPA) and Zoning Text Amendment that would result in the realignment of the dividing line between General Plan Subareas 5A and 5B (also identified as Areas A and B of SP-13), and would transfer approximately 5.45 acres from Area B to Area A. Area A uses would remain commercial-only and Area B would remain mixed-use. The previous EIR analyzed impacts on Area B (15.85 acres), as Area A encompassed the existing Bella Terra site to the east as well as the former Mervyn's building and attached retail building, neither of which were contemplated as part of the previous project.

Specifically, the General Plan would be amended as follows by the revised project: General Plan Subarea 5A would increase from approximately 46.9 acres to approximately 52.35 acres and Subarea 5B would decrease from approximately 15.85 acres to approximately 10.4 acres. This revised GPA would result in an increase in area and use of commercial-only development within Area A and a reduction in commercial area and residential units (from 713 to 468 units) within Area B. As approved in 2008, a maximum of four stories are permitted along Edinger Avenue and up to six stories are permitted with a minimum 65-foot setback from Edinger Avenue. No change in the maximum number of stories is proposed. Figure 2-4 (Existing SP-13 Designation Area) and Figure 2-5 (Proposed SP-13 Designation Area) illustrate the existing boundaries of Areas A and B (as permitted through adoption of Option 1 of the previous project) and the proposed boundaries that would be realigned through implementation of this revised project.

The associated ZTA would amend SP-13 to increase the Area A designation and correspondingly decrease the Area B designation. The ZTA would also permit big box and fuel station uses and establish associated design and development standards for such uses within Area A. The Area B mixed-use overlay would remain the same as previously analyzed but would be reduced from approximately 15.85 acres to approximately 10.4 acres with a maximum of 468 residential units and 30,000 sf of retail.

The floor area ratios (FAR) would remain the same for Areas A and B as what is currently permitted. Table 2-2 (Conceptual Plan Floor Area Ratio) below illustrates the FAR designation for each area and shows how the conceptual plan would fall within the permitted limits.

Table 2-2 Conceptual Plan Floor Area Ratio

SP-13 Areas	*Permitted Commercial FAR Designation*	*Commercial FAR Revised Conceptual Plan*	*Permitted Mixed-Use FAR Designation*	*Mixed-Use FAR Revised Conceptual Plan (includes parking garage)*
A	0.5 FAR	**0.38 FAR**	1.5 FAR	**N/A**
B	0.2 FAR	**0.07 FAR**	1.75 FAR	**1.46 FAR**

The revised project includes an application for Tentative Tract Map No. 17261 after a future lot line adjustment in order to accommodate the proposed residential mixed-use portion of the revised project.

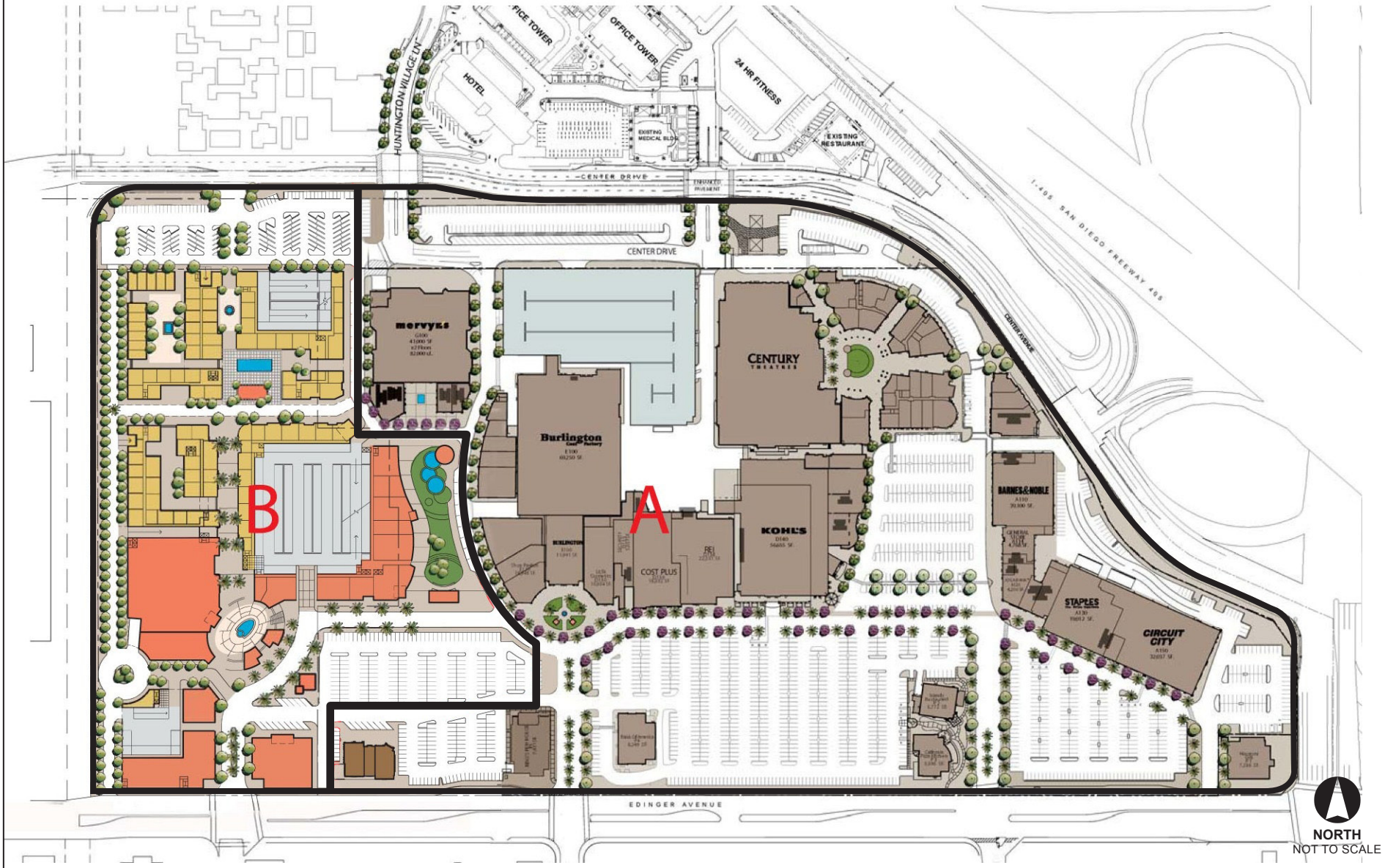
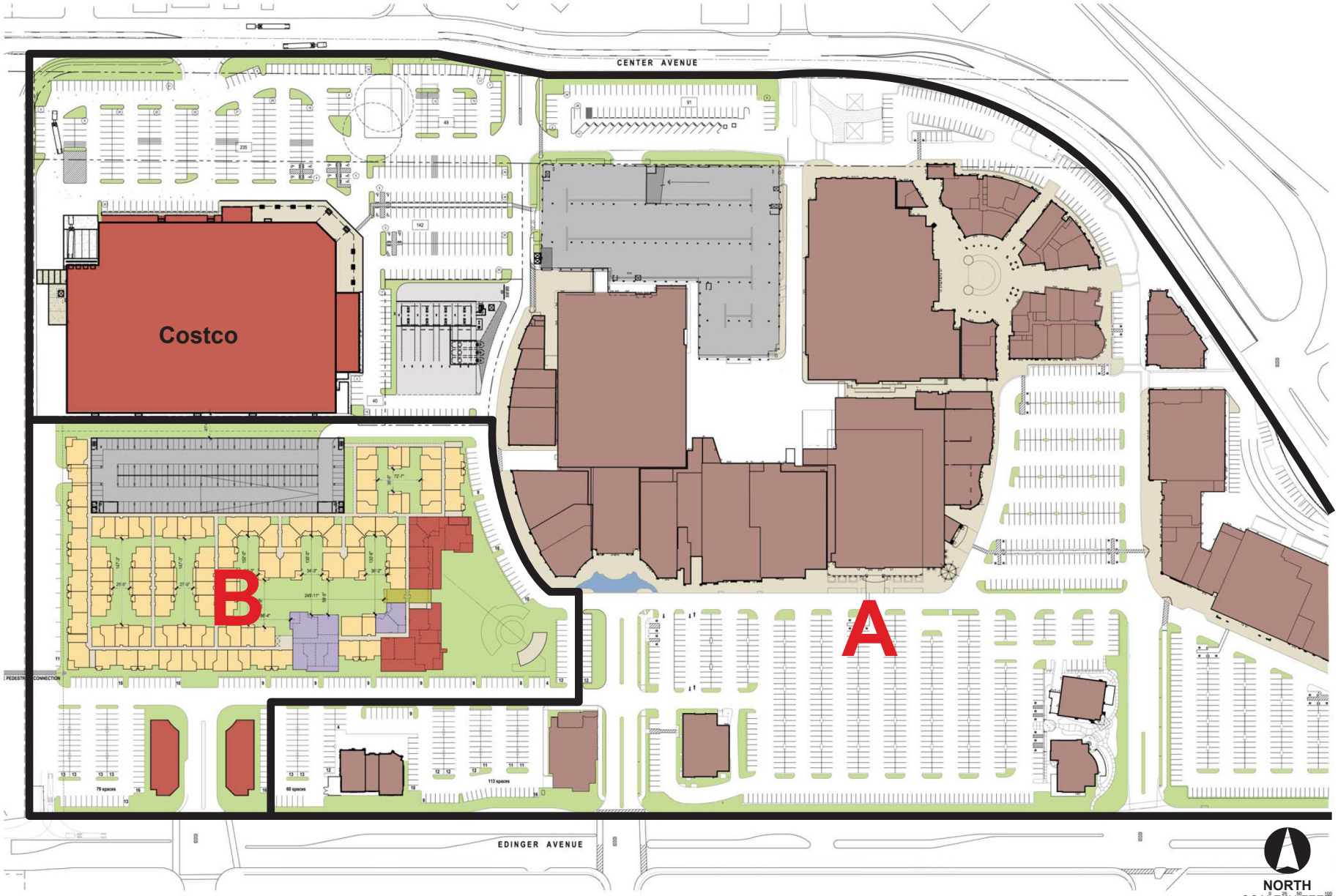


FIGURE **2-4**

Existing SP Area A and Area B (with Previously Proposed Plan)



Source: KTGY, 2010.

Revised Project SIte

FIGURE **2-5**

Proposed SP Area A and Area B (with Revised Project)

2.5.2 Revised Development

The revised project would be split into two phases: a big box commercial phase (development of a Costco store) and The Village at Bella Terra mixed-use phase, including residential and retail uses. A formal application has been submitted for site plan review for the big box phase and consists of the following: a 154,113 sf Costco building, including an ancillary tire sales/installation center and a publicly accessible food service. In addition to the warehouse, a four-island (eight dispensers and 16 pumps) automobile fueling facility is proposed on site. The Costco would replace the existing vacant Mervyn's building and attached retail building as shown in Figure 2-6 (Revised Conceptual Master Plan).

A formal application has also been submitted for the mixed-use portion of the project, construction of the revised project is not anticipated for approximately one and a half years. The proposed conceptual plan would be a reduction from the previously approved 713 dwelling units and 138,085 sf of commercial retail uses to the revised 468 dwelling units and 30,000 sf of commercial retail space. In addition, there would also be 13,500 sf of residential amenities such as a recreation room, fitness center, leasing office, and lobby areas. Aside from the reduction in the maximum amount of permitted residential and commercial mixed-uses, all other aspects of the conceptual plan are identical to that analyzed in the previous EIR.

2.5.3 Vehicular Access, Circulation, and Parking

Off-Site Vehicular Access

Primary access for the revised project will be provided by Edinger Avenue and Center Avenue.

Edinger Avenue is located immediately south of the project site and is designated by the City of Huntington Beach General Plan Circulation Element as a major arterial street. An existing access driveway along Edinger Avenue would provide ingress/egress to the new commercial and residential parking component. In addition, a new right-in/right-out driveway would be located along Edinger Avenue at the far west side of the site, running from Edinger Avenue to the northern portion of the site. While this access point does not currently exist, it was contemplated and approved in the previous project.

Center Avenue is located immediately north of the project site and is designated by the City of Huntington Beach General Plan Circulation Element as a collector arterial street. An existing access driveway along Center Avenue (furthest west) would provide ingress/egress to the Costco component of the project site. Additionally, an existing access driveway along Center Avenue that is more central to the property, currently aligning with Huntington Village Lane (approximately north of the vacant Mervyn's building), would be closed and relocated to the east to serve the Costco portion of the site. This modified access point would be a signalized, offset intersection with Huntington Village Lane.

On-Site Vehicular Circulation and Parking

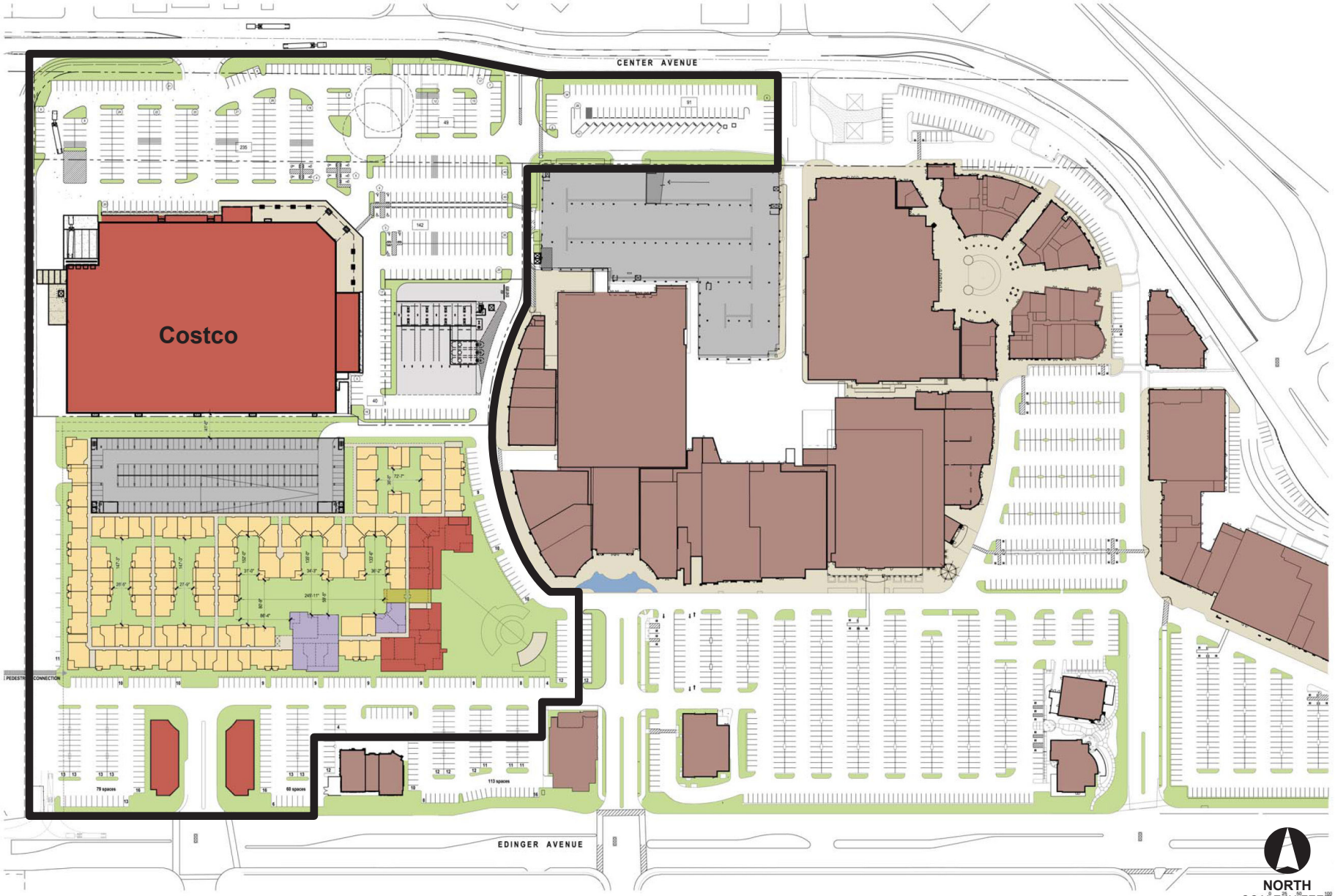
As described above, access to the project site would be provided from Edinger Avenue and Center Avenue. Internal access within the project site would be provided primarily by two drive aisles on the western and eastern edges, traversing the site from north to south. The drive aisle traversing the western border of the project site would also double as an emergency access lane. East-west access ways would be provided within the surface parking areas.

Approximately 700 parking stalls would be provided in a new parking structure on the southern portion of the site for the residential-uses of the revised project. Approximately 270 parking spaces will also be developed to the south and east of the mixed-use portion of the revised project. Parking for the mixed-use and Costco portions of the revised project will ultimately be determined by a shared parking study (to be prepared during project permitting). Costco's parking will be provided primarily via surface parking and in the existing parking structure located at the northern end of the site, immediately east of the vacant Mervyn's building.

2.5.4 Construction Scenario

Pending approval of the revised project and subsequent approval of a Site Plan Review and Tentative Tract Map, construction of the revised project is anticipated to begin in 2010. Construction is anticipated to be conducted in two stages. Stage 1 includes demolition and the construction of the Costco development, and Stage 2 includes the construction the residential and additional retail development. Construction of Stages 1 and 2 would be completely independent of each, with the exception that all-site demolition and abatement would occur with development of Stage 1. Construction of Phase 1 would begin in 2010 and ending in the winter of 2011, with construction activities for the residential portion beginning within a month of completion of Phase 1 and complete by spring 2013. No more than 2 acres would be disturbed at any one period of time by earth moving equipment. Construction activities would generally involve five phases for both the Costco and the mixed-use portion of the project: (1) abatement and demolition, (2) excavation and shoring, (3) trenching, (4) construction (which includes pile driving and building and parking construction), and (5) final coating along with landscaping improvements and paving activities.

Abatement and demolition activities would occur over the first four months, followed by import, grading, and excavation activities for an additional two months. It is anticipated that approximately 45,000 cubic yards of soil would be imported for the Costco portion of the revised project and approximately 30,000 cubic yards of soil would be imported for the residential portion of the revised project. During demolition and construction, the project site will be watered four times daily.



***Source*:** KTGY, 2010.

FIGURE **2-6**

Revised Conceptual Master Plan

2.6 SUMMARY OF CHANGES BETWEEN PREVIOUS AND REVISED PROJECT

The previous EIR evaluated the then-proposed project as well as two options, referred to as Option 1 and Option 2. Option 2 was determined to represent the worst-case scenario in terms of traffic-related impacts. Specifically, Option 2 included development of 538 residential units and 181,118 sf of commercial space and 165-room hotel, as evaluated in the previous EIR. The revised project would include development of a big-box Costco store in place of the mixed-use development that was previously analyzed on the northern portion of the project site. The revised project would also result in the demolition of the 90,885 sf Mervyn's building, which was not originally analyzed in the previous EIR. In its place, surface parking for Costco and a gas station would be provided. Mixed-uses would still be developed in the southern portion of the project site, although to a lesser extent than the previous project, with a maximum of 468 residential units and 30,000 sf of commercial retail.

2.7 INTENDED USES OF THIS ADDENDUM

This Addendum has been prepared to analyze environmental impacts associated with the planning, construction, and operation of the revised project as compared to the previous EIR. Additionally, this Addendum identifies those mitigation measures that would be applicable to the revised project to minimize or eliminate impacts. This document is intended to serve as an informational document to recognize changes at the site and in the revised project. Additionally, this Addendum will provide the primary source of environmental information for the lead agency to consider when exercising any permitting authority or approval power directly related to implementation of the proposed project.

2.8 PUBLIC ACTIONS AND APPROVALS REQUIRED

The City of Huntington Beach is the Lead Agency for the project and has discretionary authority over the project and project approvals. This includes the approval of this Addendum document for the revised project.

This Addendum serves as the required environmental documentation for the following discretionary approvals that are required to implement the revised project:

- **General Plan Amendment No. 2010-001**—General Plan Subarea 5A would increase from approximately 46.9 acres to approximately 52.35 acres and Subarea 5B would decrease from approximately 15.85 acres to approximately 10.4 acres. This revised GPA would result in an increase in area and use of commercial-only development within Area A and a reduction in commercial area and residential units (from 713 to 468 units) within Area B. The FAR would remain the same for Areas A and B as what is currently permitted as described in Subsection 2.5.1.
- **Zoning Text Amendment No. 2010-001**—Amendment of the current SP-13 (Specific Plan 13) designation to increase the Area A designation and correspondingly decrease the Area B designation. The ZTA would also permit big box and fuel station uses and establish associated design and development standards for such uses within Area A. The Area B mixed-use overlay

would remain the same as previously analyzed but would be reduced from approximately 15.85 acres to approximately 10.4 acres with a maximum of 468 residential units and 30,000 sf of retail.

- **A Site Plan Review (SPR)—**To allow development of the residential and commercial uses. The SPR is subject to approval by the Planning Director.
- **Tentative Tract Map No. 17261 (TTM 17261)—**To subdivide the property after a future lot line adjustment in order to accommodate the proposed residential mixed-use portion of the revised project.

2.8.1 State and Local Agencies

In addition to the City of Huntington Beach (the Lead Agency), there are also federal, regional, and state agencies that have discretionary or appellate authority over the project and/or specific aspects of the project. The responsible agencies will also rely on this EIR when acting on such projects. Those federal, State, or local agencies that would rely upon the information contained in this EIR when considering approval include, but are not necessarily limited to, the following:

- California Regional Water Quality Control Board (Permit for dewatering during construction; and National Pollutant Discharge Elimination System [NPDES] permit)
- State Water Resources Control Board (General Construction Activity Stormwater Permit)
- Orange County Sanitation District—Wastewater service
- Caltrans
- Orange County Health Care Agency— underground storage tank (UST) regulations
- South Coast Air Quality Management District

2.9 REFERENCES

DJM Capital Partners, Inc. 2010. *Project Description* for The Village at Bella Terra, July 6.

Huntington Beach, City of. 2010. *Environmental Assessment Form* for Bella Terra Phase II Associates, LLC, March 15.

CHAPTER 3 Resource Areas Not Requiring New Analysis

This chapter identifies and discusses resource areas for which no or minimal new analysis was found to be necessary. The following topics were addressed in the previous, certified EIR located on the same site and involving the same existing conditions as those related to the revised project. Under each topic below, impact analysis is provided explaining why the proposed land use changes would not result in changes to the previous findings.

Furthermore, for each of the resource or issue areas listed in Section 3.1, the comparison of anticipated environmental impacts of the revised project with those identified for the previous project supports the required CEQA findings below. Specifically, none of the conditions set forth in Section 15162 of the 2010 CEQA Guidelines that would require preparation of a supplemental EIR has been met for the issue areas listed in Section 3.1:

- The revised project would not result in new significant impacts, nor is there a substantial increase in the severity of impacts from that identified in the previous EIR.
- There is no information in the record or otherwise available that indicates there are substantial changes in circumstances that would require major revisions to the previous EIR.
- There is no substantial new information that would result in a new significant impact requiring major revisions of the previous EIR.
- There are no alternatives to the previous project or additional mitigation measures that would substantially reduce one of more significant impacts identified in and considered in the previous EIR.

Applicable mitigation measures for each issue area are listed with the impact for which the measures are necessary. As part of the preparation of the Addendum, the numbering of mitigation measures has changed from the previous EIR. A comprehensive comparison of mitigation measures required for both the previous and revised projects, including the revision to numbering, is provided in Appendix A (Revised Project Mitigation Monitoring and Reporting Program).

3.1 RESOURCE TOPICS NOT REQUIRING SUBSTANTIAL ADDITIONAL ANALYSIS IN THE ADDENDUM EIR

Following a review of the previous EIR and the revised project information, it was determined that only limited additional analysis was needed for the following resource areas:

- Biological Resources
- Cultural Resources
- Geology and Soils

- Hydrology and Water Quality
- Population and Housing
- Public Services
- Recreation
- Utilities and Service Systems

3.1.1 Biological Resources

Existing conditions on the project site have not changed since certification of the previous EIR. The site is currently developed with vacant commercial/auto service uses. The project site and surrounding vicinity is generally flat with no pronounced highs or lows. Vegetation on the project site consists of trees and ornamental shrubs, with the majority of mature trees lining the western boundary of the site adjacent to the Union Pacific Railroad (UPRR) tracks. No riparian habitat or other sensitive natural communities, including wetlands, exist within the project site. In addition, the project site is not part of a major or local wildlife corridor/travel route, as it does not serve to connect two significant habitats.

As discussed in the previous EIR, there are no sensitive species anticipated to exist on the project site; however, migratory avian species may use portions of the site (e.g., the large trees along the western boundary) for nesting during breeding season, which are protected under the *Migratory Bird Treaty Act* (MBTA). Consequently, the same mitigation measure that was identified in the previous EIR would still be required for development under the revised project. MM3.1-1 (previously, MM4.3-1) would require surveys for MBTA-protected species, and includes impact-avoidance measures to ensure that the substantial loss of these species will not occur. Although the City does not have a tree protection ordinance, trees may be removed and replaced at a two-to-one ratio with 36-inch box trees or palm equivalent, or some trees may be transplanted on site. Additionally, implementation of MM3.1-1 would ensure that project development would not conflict with any local policies or ordinances protecting biological resources, which are designed to protect sensitive species and their habitats within the City from development and related construction activities.

The proposed changes in land use to allow more intensive commercial uses (Costco) on the northern portion of the site compared to the mixed-uses that were originally analyzed would result in similar impacts because the site is already developed, existing conditions remain the same, and a similar overall building footprint would be constructed. Similar to the previous EIR, impacts to biological resources would be less than significant.

Relevant Mitigation from Previous EIR

MM3.1-1 *Nesting habitat for protected or sensitive avian species:*

1. *Vegetation removal and construction shall occur between September 1 and January 31 whenever feasible.*
2. *Prior to any construction or vegetation removal between February 15 and August 31, a nesting survey shall be conducted by a qualified biologist of all habitats within 500 feet of the construction area. Surveys shall be conducted no less than 14 days and no more than 30 days prior to commencement of construction activities and surveys will be conducted in accordance with CDFG*

protocol as applicable. If no active nests are identified on or within 500 feet of the construction site, no further mitigation is necessary. A copy of the pre-construction survey shall be submitted to the City of Huntington Beach. If an active nest of a MBTA protected species is identified onsite (per established thresholds) a 250-foot no-work buffer shall be maintained between the nest and construction activity. This buffer can be reduced in consultation with CDFG and/or USFWS.

3. *Completion of the nesting cycle shall be determined by qualified ornithologist or biologist.*

3.1.2 Cultural Resources

As discussed in the previous EIR, the project site is currently developed with vacant commercial/auto service uses and current surface conditions do not allow for an adequate survey of potential surface or sub-surface cultural artifacts. There are no historic resources on the project site and no archaeological or paleontological resource sites are known to exist within the project site or in the immediate vicinity. Therefore, the project site is not considered to be sensitive with respect to archaeological resources or paleontological resources. Additionally, no formal cemeteries are known to have occupied the project site; any human remains encountered would likely come from archaeological or historical archaeological contexts.

Although considered unlikely, the lack of findings does not eliminate the potential for archaeological or paleontological resources (including human burials) to be identified during ground-disturbing activities associated with future project development. The same mitigation measures that were identified in the previous EIR would be required for development under the revised project. Mitigation measures MM3.1-2 through MM3.1-4 (previously MM4.4-1 through MM4.4-3) would ensure that, in the unlikely event that intact cultural materials are encountered during site development, these materials would be identified and scientifically removed and preserved, as appropriate.

Buildout under the revised project would result in the same impacts to cultural resources as those discussed in the previous EIR because all future development would be required to adhere to similar standards. Similar to the previous EIR, impacts to cultural resources would be less than significant.

Relevant Mitigation from Previous EIR

MM3.1-2 *The Applicant shall arrange for a qualified professional archaeological and paleontological monitor to be present during all project-related ground-disturbing activities. In addition, all construction personnel shall be informed of the need to stop work on the project site in the event of a potential find, until a qualified archaeologist or paleontologist has been provided the opportunity to assess the significance of the find and implement appropriate measures to protect or scientifically remove the find. Construction personnel will also be informed that unauthorized collection of cultural resources is prohibited.*

MM3.1-3 *If archaeological or paleontological resources are discovered during ground-disturbing activities, all construction activities within 50 feet of the find shall cease until the archaeologist/paleontologist evaluates the significance of the resource. In the absence of a determination, all archaeological and paleontological resources shall be considered significant. If the resource is determined to be significant, the archaeologist or paleontologist, as appropriate, shall prepare a research design for recovery of the resources in consultation with the State Office of Historic Preservation that satisfies the requirements*

of Section 21083.2 of CEQA. The archaeologist or paleontologist shall complete a report of the excavations and findings, and shall submit the report for peer review by three County-certified archaeologists or paleontologists, as appropriate. Upon approval of the report, the City shall submit the report to the South Central Coastal Information Center at California State University, Fullerton, and keep the report on file at the City of Huntington Beach.

MM3.1-4 *In the event of the discovery of a burial, human bone, or suspected human bone, all excavation or grading in the vicinity of the find shall halt immediately, the area of the find shall be protected, and the Developer shall immediately notify the City and the Orange County Coroner of the find and comply with the provisions of PRC Section 5097. If the human remains are determined to be prehistoric, the Coroner will notify the NAHC, which will determine and notify a Most Likely Descendent (MLD). The MLD shall complete the inspection of the site within 24 hours of notification, and may recommend scientific removal and non-destructive analysis of human remains and items associated with Native American burials.*

3.1.3 Geology and Soils

The project site is not located within an Alquist-Priolo Earthquake Fault Zone and there are no known faults (active, potentially active, or inactive) on site. Additionally, the project site is in a relatively flat area with no pronounced slopes. The revised project would be provided sanitary sewer service by the City of Huntington Beach. Therefore, similar to the previous EIR, no impacts from fault rupture, landslides, or soils incapable of adequately supporting the use of septic tanks would occur.

However, the project site is in a seismically active area. During the design life of development, seismic groundshaking is likely to occur. Construction activities associated with the revised project could lead to soil erosion. The project would also be located on expansive, subsidence-prone, and potentially liquefiable soils, as identified in the previous EIR. Adherence to the City's *Municipal Code* would ensure the maximum practicable protection available for structures on the project site. Project design is required to include the application of CBC seismic standards as the minimum seismic-resistant. Additionally, the same measures that were identified in the previous EIR would be required for the revised project. Compliance with existing regulations and slope and soil stability standards required by the City of Huntington Beach General Plan, Building Code, and Grading and Excavation Code, in addition to implementation of CR3.1-1, MM3.1-5, and CofA3.1-1 (previously CR4.5-1, MM4.5-1, and CofA4.7-1), would ensure that impacts associated with seismically induced groundshaking and seismic-related ground failure, erosion, and other soil instability impacts resulting from revised project construction would be less than significant.

Buildout under the revised project would result in the same less-than-significant impacts as those discussed in the previous EIR because all future development would adhere to similar building standards and be constructed on the same geologic conditions.

Relevant Mitigation from Previous EIR

CR3.1-1 *A California-licensed Civil Engineer (Geotechnical) shall prepare and submit to the City a detailed soils and geotechnical analysis with the first submittal of a grading plan. This analysis shall include*

Phase II Environmental soil sampling and laboratory testing of materials to provide detailed recommendations for grading, chemical and fill properties, liquefaction and landscaping.

MM3.1-5 *The grading plan prepared for the proposed project shall contain the recommendations of the final soils and geotechnical report. These recommendations shall be implemented in the design of the project, including but not limited to measures associated with site preparation, fill placement, temporary shoring and permanent dewatering, groundwater seismic design features, excavation stability, foundations, soil stabilization, establishment of deep foundations, concrete slabs and pavements, surface drainage, cement type and corrosion measures, erosion control, shoring and internal bracing, and plan review.*

CofA3.1-1 *Prior to receiving a precise grading or building permit, the Applicant shall prepare a site Grading and Drainage Plan containing the recommendations of the final Soils and Geotechnical Reports analysis for temporary and permanent groundwater dewatering as well as for surface drainage.*

3.1.4 Hydrology and Water Quality

Runoff, Erosion, and Water Quality

The revised project would be subject to all existing regulations associated with the protection of water quality that were identified in the previous EIR. Construction of the revised project would require a City Grading Permit (*Municipal Code* Section 7.05.060) including Erosion control and water quality requirement systems (*Municipal Code* Section 17.05.310), an Erosion Control Plan (*Municipal Code* Section 17.05.320), erosion control maintenance (*Municipal Code* Section 17.05.330) and grading operations inspections (*Municipal Code* Section 17.05.340). Additionally, because the revised project would disturb more than one-acre of surface area, it would be subject to the Construction General Permit requirements, including preparation of a Storm Water Pollution Prevention Plan (SWPPP). The City of Huntington Beach Local Implementation Plan (LIP) also requires that all construction projects, regardless of size or priority, implement stormwater best management practices (BMPs) that shall include, at a minimum, erosion and sediment controls. The City of Huntington Beach LIP has incorporated the model construction program described in the Drainage Area Master Plan (DAMP) and includes requirements, guidelines, and methods that must be used for pollution prevention to protect water quality from construction discharges. Therefore, existing regulatory requirements would ensure that construction of the revised project would not result in substantial on-site erosion or off-site siltation and would therefore prevent violation of water quality standards and minimize the potential for contributing additional sources of polluted runoff.

The existing site is used for commercial and parking uses and the revised project would be similar with addition of mixed residential uses. Therefore, similar to the previous project, although the drainage pattern may be altered the revised project would not be expected to result in an increase in runoff because the project site is already substantially impervious and discharge is to a lined or underground storm drain system. Exposed surfaces would be required to be stabilized in accordance with the Municipal Code, the City of Huntington Beach LIP, and DAMP. The revised project would also be required to develop and implement a Water Quality Master Plan (WQMP) including post-construction structural and non-structural BMPs for erosion and sediment controls. The previous EIR analyzed the

potential for vehicle/equipment maintenance or fueling and vehicle storage to be located on the project site. Thus, the introduction of the automobile fueling station as part of the revised project would still be subject to the same regulations identified for the previous project. Implementation of the existing regulations along with mitigation measure MM3.1-6 (previously MM4.7-1) would reduce potential pollutant loads and ensure that appropriate BMPs are used, that regulatory requirements are met, and that any post-construction violation of waste discharge requirements (WDRs) or water quality standards would be less than significant. Additionally, existing regulatory requirements would ensure that potential impacts associated with on-site erosion or off-site siltation of the revised project would be reduced to less-than-significant levels similar to the revised project.

Groundwater Supplies

Historical high groundwater levels occur at 5 feet below ground surface at the project site and unsaturated soils have a high water content (Geotechnical Professionals, Inc. 2002). Some permanent structures (e.g., basements and underground parking) could be located below the local groundwater table. Any permanent dewatering activities would require coverage under the De Minimus Threat General Permit or an individual WDR/ National Pollutant Discharge Elimination System (NPDES) Permit, and consequently, it would be subject to discharge quantity limitations. The same project conditions of approval CofA3.1-1 (previously CofA4.7-1) would be required for the revised project for groundwater dewatering and surface drainage that would serve to minimize potential effects of temporary or permanent groundwater dewatering. Additionally, if the project Applicant proposes to develop underground structures that include permanent groundwater dewatering, implementation of mitigation measure MM3.1-7 (previously MM4.7-2) would ensure that permanent groundwater dewatering does not cause or contribute to a lowering of the local groundwater table that would affect nearby water supply wells. Consequently, potential impacts associated with permanent dewatering on the local groundwater table and water supplies would be the same for the revised project, and would be less than significant with implementation of existing regulatory requirements, project conditions of approval CofA3.1-1 (previously CofA4.7-1), and mitigation measure MM3.1-7 (previously MM4.7-2).

Stormwater and Flooding

The project site is currently flat and approximately 90 percent impervious draining via sheet flow to local streets and Edinger Avenue or underground storm drains to the Murdy Channel. Similar to the previous project, the revised project may substantially alter the project site drainage by grading to change drainage direction, infrastructure alterations that could alter drainage areas, and changes to the amount of impervious surfaces draining to Edinger Avenue. Stormwater runoff from the project site could exceed the existing system's conveyance capacity, even if overall runoff rates are not increased compared to existing conditions. Furthermore, the storm drain system for the adjacent Bella Terra Mall development has a higher surface water elevation north of the existing Montgomery Ward site than the project site. Therefore, stormwater would spill south and onto the project site contributing to project site run-on. Implementation of the revised project could substantially alter the project site drainage such that storm drain system capacity could be exceeded resulting in on- or off-site flooding. Implementation of

mitigation measure MM3.1-8 (previously MM4.7-3) would reduce the potential for flooding and storm conveyance capacity to less-than-significant levels, similar to the previous EIR.

100-Year Flood Hazard Areas

The project site is located within a 100-year flood hazard area from failure of the East Garden Grove–Wintersburg Channel as mapped by Federal Emergency Management Agency (FEMA). The base flood elevation (BFE) and floodway zone for this flood hazard area has not yet been defined by FEMA. However, the project site is located at the edge of the flood hazard area, in an area that is likely flooded by lateral spreading, and would not result in substantially more structures in the overall floodplain compared to existing conditions (the floodplain is currently primarily developed with structures). The revised project would be subject to the same standards identified in the previous EIR, and the following existing regulatory requirements apply:

- Residential uses (including basements) must be elevated such that the lowest floor would be constructed 2 feet above highest existing grade (as required by FEMA and Chapter 222 of the City of Huntington Beach Zoning and Subdivision Ordinance).
- Non-residential structures, including utilities and sanitary facilities must be elevated or flood-proofed to below the flood depth and capable of resisting hydrostatic and hydrodynamic loads and effects of buoyancy as required by Chapter 222 of the City of Huntington Beach Zoning and Subdivision Ordinance.

In accordance with FEMA requirements, minimum development requirements identified in the previous EIR would also apply that would help prevent potential impacts associated with on-site flooding. These standards have been designed to be protective of human health and safety. Consequently, with implementation of existing regulations, the revised project impacts associated with locating housing within a flood hazard area would be less than significant. Additionally, if the project Applicant proposes to develop underground structures, implementation of mitigation measures MM3.1-8 and MM3.1-9 (previously MM4.7-3 and MM4.7-4), along with project condition of approval CofA3.1-1 (previously CofA4.7-1), would reduce the potential for on-site flooding of underground structures and other areas and on-site flood impacts would be less than significant.

Relevant Mitigation from Previous EIR

MM3.1-6 *The Applicant shall prepare a City of Huntington Beach-approved Water Quality Management Plan in accordance with the DAMP requirements for a Project WQMP and measures described below.*

A final WQMP shall be prepared to satisfy the requirements of the DAMP and City LIP. The final WQMP shall incorporate water quality BMPs for all improved phases of the proposed project. Prior to receiving a precise grading permit, three signed copies and an electronic copy on CD (.pdf or *.doc format) shall be submitted to the Public Works Department. The final WQMP shall include the following additional requirements:*

Project and Site Characterization Requirements

- *Entitlement Application numbers and site address shall be included on the title sheet of the WQMP*
- *In project description section, explain whether proposed use includes onsite food preparation, eating areas (if not please state), outdoor activities to be expected, vehicle maintenance, service, washing cleaning (if prohibited onsite, please state).*
- *All potential pollutants of concern for the proposed project land use type as per Table 7.II-1 of the Orange County Model Water Quality Management Plan shall be identified*
- *A narrative describing how all potential pollutants of concern will be addressed through the implementation of BMPs and describing how site design BMP concepts will be considered and incorporated into the project design shall be included.*
- *Existing soil types and estimated percentages of perviousness for existing and proposed conditions shall be identified*
- *In Section I of the WQMP, state verbatim the Development Requirements from the Planning Department's letter to the Applicant.*
- *A figure showing the selected treatment BMPs and drainage areas shall be included in the WQMP.*

Structural Treatment BMPs

- *Infiltration-type BMPs shall not be used. These would not be suitable or feasible for the project site because, as mentioned above, the project site soils have a shallow depth to seasonal high groundwater.*
- *Wet swales and grassed channels shall not be used because of the slow infiltration rates of project site soils and potentially shallow depth to groundwater*
- *Dry and wet detention basins and constructed wetlands are not recommended for the project site because of the amount of area required for treatment and potential impacts to shallow groundwater. Additionally, wet detention basins would require approval by the vector control agency.*
- *If proprietary Structural Treatment Control devices are used, they shall be sited and designed also in compliance with the manufacturers design criteria.*
- *Treatment BMPs shall be selected such that standing water drains within 24 hours or as required by the City's vector control.*
- *Excess stormwater runoff shall bypass the treatment BMPs unless they are designed to handle the flow rate or volume from a 100-year storm event without reducing effectiveness. Effectiveness of any treatment BMP for removing the pollutants of concern shall be documented.*
- *The WQMP shall incorporate water efficient landscaping using drought tolerant, native plants in accordance with Landscape and Irrigation Plans as set forth by the Association (see below).*
- *Pet waste stations shall be provided and maintained.*

- *Building materials shall minimize exposure of bare metals to stormwater. Copper or Zinc roofing materials, including downspouts, shall not be used. Bare metal surfaces shall be painted with non-lead containing paint.*

For all structural treatment and source control BMPs, the WQMP shall identify the responsible party, such as a Master Residential Association and Master Commercial Association or property owner, for maintenance of the treatment system, and a funding source or sources for its operation and maintenance. The term Association refers to the responsible party. Operations and maintenance BMPs shall include, but not be limited to:

- *The Association shall dictate minimum landscape maintenance standards and tree trimming requirements for the total project site. Landscape maintenance must be performed by a qualified landscape maintenance company or individual in accordance with a Chemical Management Plan detailing chemical application methods, chemical handling procedures, and worker training. Pesticide application shall be performed by a certified applicator. No chemicals shall be stored on-site unless in a covered and contained area and in accordance with an approved Materials Management Plan. Application rates shall not exceed labeled rates for pesticides, and shall not exceed soil test rates for nutrients. Slow release fertilizers shall be used to prevent excessive nutrients in runoff or irrigation waters.*

- *The Association shall have the power and duty to establish, oversee, guide, and require proper maintenance and tree trimming procedures per the ANSI A-300 Standards as established by the International Society of Arborist. The Association shall require that all trees be trimmed by or under the direct observation/direction of a licensed/certified Arborist, for the entire The Village at Bella Terra improvement area. The Association shall establish minimum standards for maintenance for the total community, and establish enforcement thereof for the total community. The Association shall rectify problems arising from incorrect tree trimming, chemical applications, and other maintenance within the total community.*

- *Landscape irrigation shall be performed in accordance with an Irrigation Management Plan to minimize excess irrigation contributing to dry- and wet-weather runoff. If automated sprinklers are used, they shall be inspected at least quarterly and adjusted yearly to minimize potential excess irrigation flows. Landscape irrigation maintenance shall be performed in accordance with the approved irrigation plans, the City Water Ordinance and per the City Arboricultural and Landscape Standards and Specifications.*

- *Proprietary stormwater treatment systems maintenance shall be in accordance with the manufacturer's recommendations. If a non-proprietary treatment system is used, maintenance shall be in accordance with standard practices as identified in the CASQA (2003) handbooks, City BMP guidelines, or other City-accepted guidance.*

- *Education programs. Signage, enforcement of pet waste controls, and public education would improve use and compliance, and therefore, effectiveness of this BMP and reduce potential for hazardous materials and other waste in stormwater runoff. The Association shall prepare and install appropriate signage, disseminate information to residents and retail businesses, and include pet waste controls in the Association agreement/Conditions, Covenants, and Restrictions.*

- *Street sweeping shall be performed at an adequate frequency to prevent build up of pollutants (see http://www.fhwa.dot.gov/environment/ultraurb/ for street sweeping effectiveness).*

- *Maintenance Plan. The Association shall develop a maintenance plan for BMPs and facilities identifying responsible parties and maintenance schedules and appropriate BMPs to minimize discharges of contaminants to storm drain systems during maintenance operations. No discharge of building or courtyard/open space wash water shall enter the storm drain system unless treated and approved by the City of Huntington Beach.*
- *Reporting requirements: the Association shall prepare an annual report and submit the annual report to the City of Huntington Beach documenting the BMPs operations and maintenance conducted that year. The annual report shall also address the potential system deficiencies and corrective actions taken or planned.*

The Applicant is encouraged to consider the following BMPs:

- *Use of porous concrete or asphalt (if acceptable to the Geotechnical Engineer) or other pervious pavement for driveways, paths, sidewalks, and courtyards/open space areas to the maximum extent practicable will reduce pollutants in stormwater runoff as well as provide some detention within the material void space. If porous paver blocks are used, they must be adequately maintained to provide continued porosity (effectiveness).*
- *Incorporation of rain gardens or cisterns to reuse runoff for landscape irrigation*
- *Site design and landscape planning to group water use requirements for efficient irrigation*
- *Sand filters or other filters(including media filters) for rooftop runoff*
- *Dry swales a dry swale treatment system could be used if sufficient area, slope gradient, and length of swale could be incorporated into the project design (PBS&J 2008). Dry swales could remove substantial amounts of nutrients, suspended solids, metals, and petroleum hydrocarbons (PBS&J 2008).*
- *Other proprietary treatment devices (if supporting documentation is provided)*

These BMPs shall not be used because they have not been shown to be effective in many situations. Therefore, unless sufficient objective studies and review are available and supplied with the WQMP to correctly size devices and to document expected pollutant removal rates the WQMP shall not include:

- *Hydrodynamic separator type devices as a BMP for removing any pollutant except trash and gross particulates*
- *Oil and Grit separators*

CofA3.1-1 *Prior to receiving a precise grading or building permit, the Applicant shall prepare a site Grading and Drainage Plan containing the recommendations of the final Soils and Geotechnical Reports analysis for temporary and permanent groundwater dewatering as well as for surface drainage.*

MM3.1-7 *The Applicant shall prepare a Groundwater Hydrology Study to determine the lateral transmissivity of area soils and a safe pumping yield such that dewatering activities do not interfere with nearby water supplies. Based on the Groundwater Hydrology Study, the Geotechnical, Hydrogeologic, or other qualified Engineer shall determine whether permanent groundwater dewatering is feasible within the constraints of a safe pumping level. The project Applicant shall incorporate the qualified Engineers designs and recommendations into project plans. If safe groundwater dewatering is determined to not be feasible, permanent groundwater dewatering shall not be implemented. The City's Director of Public*

Works shall approve or disapprove of any permanent groundwater dewatering based on the Groundwater Hydrology Study and qualified Engineer recommendations.

MM3.1-8 *Prepare a Hydrology and Hydraulics Study and City-approved Site Development and Drainage Plan and reduce peak runoff rates to the existing conditions 25-year storm event peak runoff rate; the design capacity of the City storm drainage channels.*

Prior to receiving a precise grading permit, the project Applicant shall:

- *Prepare a Site Development and Drainage Plan*
- *Prepare an existing and proposed project Hydrology and Hydraulics Study based on the Site Development and Drainage Plan. The existing hydrology shall include an evaluation of run-on to the project site because of spillage from the Bella Terra Mall drainage system, north of the Montgomery Ward Site.*
- *Implement stormwater detention BMPs, based on the Hydrology and Hydraulics Study, for all storm events up to the 100-year storm event, to ensure that peak flow rates from the project site to the off-site storm drain system do not exceed the existing 25-year storm event peak flow rate.*
- *Analyze existing street flow capacity to determine exceedance of any design criteria and guidelines from the City's MPD.*
- *Additionally, stormwater detention BMPs shall be implemented such that areas draining to the existing piped storm drain systems do not exceed existing peak flow rates for the 10- and 25-year storm events and that peak flows to local streets do not exceed MPD and City design guidelines:*
  - *In accordance with the MPD, streets must be designed to leave at least one-lane free of ponded water in each direction for conveyance of the 10-year storm event, must be contained within the curbs for the 25-year storm event, cannot exceed 0.2 foot above the street curbs for the 50-year storm event, and cannot exceed 0.5 foot above the street curbs for the 100-year storm event.*
  - *The internal storm drain system must be adequate to detain sufficient stormwater runoff such that the street flow requirements are not exceeded.*
  - *Surface ponding or sump areas on the site will be limited to a maximum depth of 8-nches, and shall be distributed to areas away from building pads, and remote areas of parking lots.*
  - *Surface ponding or sump areas shall not exceed 1/3 of the proposed parking area in surface area. If there are proposed underground parking structures, they shall not be used for retention or storage, unless approved by the Director of Public Works.*
- *Stormwater retention areas shall be analyzed for back-to-back 24-hour 100-year storm events per the requirements of the Orange County Flood Control Manual.*
- *The final Hydrology and Hydraulics Study shall identify and evaluate the routing through the project site in relation to the new buildings, landscaping, utilities, and others. Sufficient detention, provided to mitigate constrained capacities in the Bella Terra Mall drainage system, shall be implemented for run-on from north of the Montgomery Ward site onto the project site.*
- *The final Hydrology and Hydraulics Study shall incorporate all NPDES requirements in effect at the time that the precise grading permit is anticipated to be issued or when the study is accepted as complete.*

- *Precise final grading and street improvement plans and studies shall be submitted to the Public Works Department for review and approval. The project developer shall incorporate into a final Drainage Plan all recommendations and requirements identified the review of the final Hydrology and Hydraulics Study and identified stormwater detention requirements/features.*

Following grading, excavation, and installation of utilities, the Public Works Department shall inspect the project site and verify that project site drainage is in accordance with the Final Drainage Plan and that required detention/storm drain system improvements have been implemented.

MM3.1-9 *The Applicant shall design and implement project site drainage features to minimize stormwater runoff and flood waters from entering into any proposed underground parking structures or otherwise contribute to flood hazards and shall incorporate flood-proofing and hydrostatic pressure measures for all below-ground structures.*

Prior to receiving a precise grading or building permit, the Applicant shall prepare a Precise Grading and Site Development and Drainage Plan identifying BMPs to minimize underground structure flooding. The Precise Grading and Site Development and Drainage Plan shall implement design features to minimize flooding of underground structures such as, but not limited to:

- *Grade areas to drain away from the structure entryways*
- *Implement run-on prevention (e.g., berms or dikes) to direct project site runoff and flood flows away from underground structure entryways*
- *Elevate underground structure entryways to two-feet above the existing grade (approximate depth of potential flooding from the East Garden Grove-Wintersburg Channel)*
- *Implement sumps and pumps within the underground structures to remove any runoff entering the underground structures (this measure shall also be subject to the WQMP and DAMP BMP requirements for discharge treatment and disposal)*

Additionally, the Applicant shall incorporate flood-proofing measures to prevent seepage flooding. Underground structures materials and design shall be in accordance with FEMA floodplain development requirements and the 2007 California Building Code for structures subject to flooding and hydrostatic pressures.

- *The geotechnical engineer and/or waterproofing specialist shall prepare design requirements for flood proofing the underground structures and ensuring that structures are build to withstand hydrostatic pressures.*
- *Any utilities located in below grade structures shall be protected from ponding water and seepage in accordance with the geotechnical engineer recommendations and 2007 California Building Code.*
- *The Applicant shall also design on-site runoff to drain away from building foundations and shall not allow for more than 8 inches of ponding at any location on-site.*

3.1.5 Population and Housing

Implementation of the revised project would result in a reduction of the maximum number of residential units from 713 to 468 allowed on the project site. Therefore, the revised project would generate

approximately 650 fewer residents on-site.[1] As discussed in the previous EIR, any future development permitted on-site would be required to provide adequate affordable housing opportunities, and code requirement CR3.1-2 (previously CR4.10-1) would still be required. CR3.1-2 would ensure that future development onsite contributes 15 percent of the total number of units as median-, low-, or very low–income units, as required by the City's zoning code. The proposed increased commercial uses would not generate a permanent population in excess of the population identified in the previous EIR. No new or increased impacts would result from the revised project, and impacts would remain less than significant, similar to the previous EIR.

Relevant Mitigation from Previous EIR

No mitigation would be required for the revised project; however, the following code requirement would still be required:

CR3.1-2 *Future on-site development shall comply with Title 23, Chapter 230, Section 230.26(B)(1) of the City Zoning Code and provide a minimum of 15 percent of all new residential construction as affordable housing units.*

3.1.6 Public Services

The revised project would result in 245 fewer residential units and the addition of a big-box retail store (Costco) with associated tire installation center and gas station as compared to the previous project. As discussed in the previous EIR, development of the previous project would not significantly impact the level of service delivery for fire and police services to the project area, nor would it result in the need for additional facilities. Security concerns related to the revised project would be addressed through the permitting process, at which time the HBPD would have the opportunity to review the proposed uses and provide input on necessary security measures, though mitigation measure MM3.1-10 (previously MM4.11-1) would still be required. The revised project would generate fewer students and result in a lesser demand for library resources due to the reduced residential portion of the project. Code requirements CR3.1-3 through CR3.1-5 (previously CR4.11-1 through CR4.11-3) would still be required. Consequently, because the revised project would result in fewer residences, no additional or increased impacts to public services would occur. Impacts would remain less than significant.

Relevant Mitigation from Previous EIR

MM3.1-10 *Radio antenna receivers (BDA's) shall be installed in all underground parking structures in order to allow emergency responders to use their radio systems.*

CR3.1-3 *The project Applicant shall pay all applicable development impact fees in effect at the time of building permit issuance to the Ocean View School District to cover additional school services required by the new development. These fees are currently $1.37 per square foot (sf) of accessible interior space for any new residential unit and $0.22 per sf of covered floor space for new commercial/retail development.*

[1] The City's 2008 person per household (pph) was 2.65; 2010 pph is 2.67. Multiplying these figures by the reduction of 245 units gives a range of 649 to 654 fewer persons.

CR3.1-4 *The Applicant shall pay all applicable development impact fees in effect at the time of building permit issuance to the Huntington Beach Union High School District to cover additional school services required by the new development. These fees are currently $2.97 per square foot (sf) of accessible interior space for any new residential unit and $0.47 per sf of covered floor space for new commercial/retail development.*

CR3.1-5 *The Applicant shall pay required library and community enrichment impact fees, prior to issuance of building permits.*

3.1.7 Recreation

Future development under the revised project would result in an increase in the general use of local and regional recreational facilities, though to a lesser degree than the previous project because fewer residential units would be constructed. As discussed in the previous EIR, future development on the project site would be required to satisfy Section 230.20 and/or Section 254.08 of the City's Zoning Ordinance, which implements the provisions of the *Quimby Act*. Specifically, Section 230.20 requires payment of a park fee for all new commercial and industrial development and all new residential development, such as apartments, not covered by Chapter 254. For new residential subdivisions, Chapter 254 requires that five acres of property for each 1,000 residents be devoted to local park and recreational purposes. This could be met through land dedication or payment of park fees, or a combination of both. While dedicated parkland directly increases the available recreation space within the City for residents, the payment of park fees from new development could be allocated to fund the acquisition and/or development of future parks or facility renovations associated with increased use of public facilities. Implementation of code requirement CR3.1-6 (previously CR4.12-1) would still be required and impacts under the revised project would remain less than significant.

Relevant Mitigation from Previous EIR

CR3.1-6 *Prior to the issuance of building permits, the Applicant shall demonstrate compliance with City parkland requirements identified in Section 230.20 and/or Section 254.08 of the City of Huntington Beach Zoning Ordinance, either through the dedication of onsite parkland or through payment of applicable fees. Any on-site park provided in compliance with this section shall be improved prior to final inspection (occupancy) of the first residential unit (other than the model homes).*

3.1.8 Utilities and Service Systems

The analyses below utilize demand factors from the previous EIR. Additionally, for consistency purposes, the entirety of the 30,000 square feet (sf) of commercial uses in the mixed-use portion of the site is conservatively estimated to be restaurant uses, which typically have higher demand rates than other commercial uses. Therefore, the commercial land use square footage identified in the tables below account for only the Costco building.

Water

The revised project would result in a water demand of approximately 134,257 gallons per day (gpd), as shown in Table 3-1 (Water Demand for the Revised Project).

Table 3-1 Water Demand for the Revised Project

Land Use	*Quantity*	*Persons per DU*	*Demand Factor*	*Estimated Flow*
Residential	468 du	2	70 gpd/du	65,520 gpd
Restaurant	30,000 sf		1.5 gpd/sf	45,000 gpd
Commercial	154,113 sf		0.15 gpd/sf	23,117 gpd
Landscape	62,027 sf		0.01 gpd/sf	620 gpd
Total				***134,257 gpd***

The previous EIR identified a water demand of 161,653 gpd (approved Option 1). Consequently, the revised project would result in a lesser demand than the previous EIR, and no new or increased impacts would result. Impacts would remain less than significant, similar to the previous EIR.

Wastewater

The revised project would result in an estimated sewer flow of approximately 163,339 gpd, as shown in Table 3-2 (Estimated Sewer Flows for the Revised Project).

The previous EIR identified a sewer generation of 199,948 gpd. Consequently, the revised project would result in less wastewater than previously analyzed, and no new or increased impacts would result. All mitigation measures and code requirements identified in the previous EIR would also apply to the revised project. Impacts would remain less than significant.

Table 3-2 Estimated Sewer Flows for the Revised Project

Land use	*Quantity*	*Duty Factor*	*Estimated Flow*
Residential	468 du	187 gpd/du	87,516 gpd
Restaurants	30,000 sf	1.5 gpd/sf	45,000 gpd
Commercial	154,113 sf	0.2 gpd/sf	30,823 gpd
Total			***163,339 gpd***

Solid Waste

The revised project would generate approximately 2,947 pounds per day (lbs/day) of solid waste, as shown in Table 3-3 (Solid Waste Generated from Revised Project).

Table 3-3 Solid Waste Generated from Revised Project			
Land Use	*Solid Waste Generation Rates (lbs/unit/day)*	*Units*	*Waste Generated (lbs/day)*
Commercial	0.006 lbs/sf/day	154,113 sf	925
Restaurant	0.005 lb/sf/day	30,000 sf	150
Residential	4 lbs/dwelling unit/day	468 du	1872
Total			***2,947 lbs/day***

The previous EIR identified a solid waste generation of approximately 3,651 lbs/day. Consequently, the revised project would generate less solid waste than previously analyzed, and no new or increased impacts would result. Impacts would remain less than significant, similar to the previous EIR.

Energy

The anticipated energy demand associated with the revised project is approximately 6,144,934 kilowatt-hours per year (kWh/year) of electricity and 74,548,773 cubic feet per year (cf/year) of natural gas, as shown in Table 3-4 (Projected Energy Demands from Revised Project).

The previous EIR identified a demand of approximately 6,899,746.25 kWh/year for electricity and 92,542,098 cf/year for natural gas. Consequently, the revised project would result in a reduced energy demand compared to previously analyzed, and no new or increased impacts would result. Impacts would remain less than significant, similar to the previous EIR.

Table 3-4 Projected Energy Demands from Revised Project			
Land Use	*Demand Rates*	*Units*	*Demand*
Electricity			
Commercial	13.55 kWh/sf/yr	154,113 sf	2,088,232 (kWh/year)
Restaurant	47.45 kWh/sf/r	30,000 sf	1,423,500 (kWh/year)
Residential	5,626.50 kWh/unit/yr	468 units	2,633,202 (kWh/year)
Total			***6,144,934 kWh/year***
Natural Gas			
Commercial	34.8 cf/sf/year	154,113 sf	5,363,133 cf/year
Restaurant	1,058.5 cf/sf/year	30,000 sf	31,755,000 cf/year
Residential	79,980 cf/unit/year	468 units	37,430,640 cf/year
Total			***74,548,773 cf/year***

Relevant Mitigation from Previous EIR

MM3.1-11 *Prior to issuance of a building permit for the proposed project, the existing 10-inch stubout connection shall be replaced with a stubout, whose size will be determined with a sewer study, to the 69-inch OCSD trunk sewer line so that a replacement sewer lateral can be installed to service the development.*

The sewer study shall also evaluate the condition of the existing OCSD manhole in Edinger Avenue to determine if the manhole requires rehabilitation. In addition, a second 12-inch point of connection shall be constructed for additional capacity, if necessary.

CR3.1-7 *Prior to issuance of a grading permit, the Applicant shall demonstrate, by providing a copy of the Notice of Intent submitted to the State Water Resources Control Board (SWRCB) and a copy of the subsequent issuance of a Waste Discharge Identification number, that coverage has been obtained under the General Permit. Projects subject to this requirement shall also prepare, submit, and implement a Stormwater Pollution Prevention Plan.*

CR3.1-8 *Prior to issuance of certificate of occupancy, the Applicant shall demonstrate that all structural and non structural BMPs described in the WQMP have been installed and implemented in conformance with approved plans and specifications, and that all storm drain structures are clean and properly constructed.*

CHAPTER 4 Environmental Analysis

4.0 INTRODUCTION TO THE ANALYSIS

This chapter identifies and discusses resource areas for which new analysis was determined to be necessary. As with topics addressed in Chapter 3, the following topics were addressed in the previous, certified EIR located on the same site and involving the same existing conditions as those related to the revised project. However, dissimilar from those impacts identified in Chapter 3, some component of the revised project warranted additional analysis to identify the level of impact of the revised project and necessary mitigation measures. Under each topic below, impact analysis is provided describing the potential environmental impacts of the revised project and a comparison to the findings of the previous EIR.

4.0.1 Resource Topics Requiring Additional Analysis in the Addendum EIR

Following a review of the previous EIR and the revised project information, it was determined that additional analysis was needed for the following resource areas:

- Aesthetics
- Air Quality
- Hazards and Hazardous Materials
- Land Use and Planning
- Noise
- Transportation and Traffic

4.1 AESTHETICS

This section analyzes impacts of the revised project with respect to potential degradation of visual quality or character. Baseline conditions with respect to views, visual character, and light and glare remain substantially the same as when the previous EIR was certified. Impacts to scenic vistas and increased light and glare would not change as a result of the revised project. This is because no scenic vistas are in the project area and the revised project would not require increased lighting requirements compared to the previous project. The impact conclusions from the previous EIR are briefly summarized in this section although no new analysis is presented for those impacts. The Initial Study for the previous project determined that analysis is not required regarding impacts within a scenic highway, as no such designation exists within the immediate vicinity of the project area.

4.1.1 Environmental Setting

The environmental setting of the project site and surrounding area has not changed with respect to visual features as described in Section 4.1.1 of the previous EIR (pages 4.1-1 through 4.1-18).

4.1.2 Regulatory Framework

The regulatory framework as described in Section 4.1.2 of the previous EIR (pages 4.1-18 through 4.1-20) has not changed since certification of the Final EIR.

4.1.3 Project Impacts and Mitigation

Analytic Method

A qualitative assessment of visual impacts was prepared by evaluating the existing visual setting and comparing it to visual conditions assumed to occur under the revised project. It is important to note that an assessment of visual impacts is not a quantitative analysis, but rather qualitative and can be largely subjective. The analysis focuses on a comparison of the visual changes between the revised project and the previous conceptual plans that were evaluated in the previous EIR to determine the short- and long-term visual effects of the revised project.

Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2010 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact if it would do any of the following:

- Have a substantial effect on a scenic vista
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway

- Substantially degrade the existing visual character or quality of the site and its surroundings
- Create a new source of light or glare which would adversely affect day or nighttime views in the area

Effects Not Found to Be Significant

Threshold	Would the project substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

The project site is not within, or visible from, a state scenic highway. Similar to the previous EIR, no impact would occur under the revised project and no further analysis is required.

Revised Impacts and Mitigation Measures

Threshold	Would the project have a substantial adverse effect on a scenic vista?

Impact 4.1-1 **The revised project would not result in a substantial adverse effect on a scenic vista. This impact is considered *less than significant*, similar to the previous EIR.**

As discussed in the previous EIR the project site currently consists of vacant commercial and auto repair uses with associated surface parking in a highly urbanized portion of the City. The project site is not located within a scenic vista, nor would development on the project site obstruct the view of any scenic vistas. This impact is considered ***less than significant***, similar to the previous EIR.

Threshold	Would the project substantially degrade the existing visual character or quality of the site and its surroundings?

Impact 4.1-2 **Implementation of the revised project would not degrade the existing visual character or quality of the site and its surroundings. This impact is considered *less than significant*, similar to the previous EIR.**

For the purpose of this analysis, a substantial degradation of the existing visual character or quality of the site would occur if the revised project introduces a new visible element that would be inconsistent with the overall quality, scale, and character of the surrounding development or that approved previously. The analysis considers the degree to which the revised project would contribute to or degrade the area's aesthetic value.

The revised project would include development of a big-box retail store (Costco) in place of the mixed-use development that was previously analyzed on the northern portion of the project site. The revised project would also result in the demolition of the existing vacant Mervyn's building, which was not analyzed in the previous EIR. Surface parking for Costco and the associated gas station would replace the existing Mervyn's. In the southern portion of the site along Edinger Avenue, mixed-uses would still

be developed though the revised project would result in more surface parking along the street frontage than the conceptual plans that were evaluated previously. With the increased building setbacks, surface parking dominates the visual foreground and tends to distance the buildings from the public realm. The building scale would be smaller under the revised project. The previous EIR evaluated an increase from four to six stories on a majority of the site, with a maximum height limit of ten stories (approximately 135 feet) on the northern portion of the site. Ultimately, the City of Huntington Beach City Council approved a maximum of six stories on the overall site with a maximum of four stories along the Edinger Avenue frontage. The revised project proposes a maximum building height of four stories across the project site, in compliance with the current development standards.

The revised project would adhere to development standards and design guidelines (including streetscape standards) as established in Specific Plan No. 13 (SP-13) and would also be consistent with the styles of the existing Bella Terra shopping center. As shown on Figure 4.1-1 (Concept Elevations), the proposed Costco building would include architectural details to soften the large façade of the structure. Along with varying parapet heights, the details include, but are not limited to, textured panels in various complementary colors, terra cotta roof tiles, stone veneers, metal accents, and canopies. Such architectural details would be visible from the north and east elevations along Center Drive and from within the project site (facing the existing Bella Terra shopping center). The south and west elevations would include few details along the façade front because these views would be screened by the railroad tracks to the west and a structured parking garage for the future residences to the south. Although the proposed Costco elevations include the above noted architectural details and design features, compliance with the overall Italian Village architectural standards of SP-13 is a subjective determination and will ultimately be decided by the Planning Commission. Furthermore, as shown on Figure 4.1-2 (Residential Concept Elevations 1) and Figure 4.1-3 (Residential Concept Elevations 2), the proposed mixed-use and residential buildings would also include architectural details to soften the large structure. The southern, eastern, and western elevations would include such details as terra cotta roof tiles, stone and brick veneers, wood trellis accents, and awnings at the first floor entrances. The northern elevation which is dominated by the parking structure will incorporate variations of these detailed elements to moderate the large façade. The conceptual residential elevations are considered to be compliant with the development standards and design guidelines of SP-13.

Substantial landscaping would be provided on the project site. Landscaping would cover approximately 10 percent of the Costco portion and 44 percent of the mixed-use portion of the site, compared to the existing four percent on the entire site. Future development under the revised project would also provide visual continuity with the existing Bella Terra Mall to the east, given that similar visual elements and architectural styles would be required under SP-13.

As discussed in the previous EIR, the project is located in an area of the City that is currently undergoing revitalization. The Beach-Edinger Corridors Specific Plan (Beach-Edinger Specific Plan) was recently approved, and is intended to present a clear and comprehensive vision for growth and change along Beach Boulevard and Edinger Avenue. The project site is not included in the Beach-Edinger Specific Plan because the Bella Terra property is subject to SP-13. However, the site is surrounded by properties located within the Beach-Edinger Specific Plan. The area north of Warner Avenue along Beach Boulevard, and including the Edinger segment, is generally planned for more intensive mixed-use

development. In particular, this northern segment is intended to act as a Town Center, or hub, providing a destination and live/work center for the City, with primarily retail and residential development.

The mixed-use development proposed in the southern portion of the revised project tends to fit the visual land use theme envisioned for the area with a high-quality urban village consisting of high-density residential and retail commercial uses within a community of pedestrian-oriented buildings separated by courtyards.

In general, although the proposed Costco would represent a change in the visual character of the site compared to the previous project, the development of such a big-box use would not be vastly different from the existing (former) commercial uses on the site. The revised Costco and mixed-use residential project would serve to improve the aesthetic character of the present project site by removing the outdated vacant commercial structures. Consequently, the revised project would not substantially degrade the existing visual character or quality of the site and its surroundings from that previously analyzed and this impact would be ***less than significant***.

Threshold	Would the project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Impact 4.1-3 **The revised project would introduce new sources of light and glare into the project vicinity. However, these sources would not adversely affect day or nighttime views in the area. This impact is considered *less than significant*.**

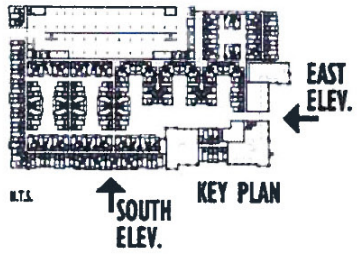
As discussed in the previous EIR, development on the project site would increase overall nighttime lighting in the project area with the introduction of additional street lighting, exterior lighting, and vehicle headlights. On the northern portion of the project site, the revised project would include development of a big-box retail store (Costco) and associated gas station in place of the mixed-use development that was previously analyzed. At its tallest, the Costco building would be approximately 37 feet high, which is below the maximum 135 feet that was analyzed in the same area under the previous project. The proposed residential structures would be a maximum of four stories, also below the previously analyzed building heights. Although there would be nighttime security lighting for the perimeter of the Costco building, the overall illumination would be less than that anticipated for the mixed-use development because Costco would not be operational at night and the structure would not be as tall. In addition, the five-level structured parking garage would be located between the back of the Costco and the majority of the residents, further shielding any potential light sources.

Additionally, while it is not anticipated that the Costco or mixed use residential buildings would include large building faces that would introduce reflective surfaces, the same mitigation measure (MM4.1-1) from the previous EIR would still be required for new development on the project site, which requires the use of nonreflective façade treatments for new development.

***Source*:** Mulvanny G2, 2010.

FIGURE **4.1-1**

Concept Elevations



SOUTH ELEVATION

EAST (PLAZA) ELEVATION

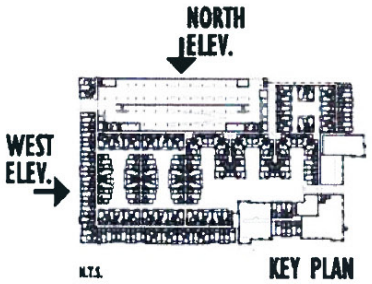
MATERIAL LEGEND

1 S-TILE ROOF
2 STUCCO FINISH
3 STONE VENEER
4 BRICK VENEER
5 STUCCO FINISHED TRIM
6 PRE-CAST TRIM
7 METAL RAILING
8 WOOD TRELLIS
9 WOOD RAFTER TAILS
10 FIBERGLASS COLUMN
11 CANVAS AWNING W/ METAL BRACKETS
12 METAL AWNING
13 SMOOTH CEMENTICIOUS PANEL
14 LIGHT FIXTURE

NORTH
SCALE

***Source*:** Mulvanny G2, 2010.

FIGURE **4.1-2**
Residential Concept Elevation 1



NORTH ELEVATION

WEST ELEVATION

MATERIAL LEGEND	
1	S-TILE ROOF
2	STUCCO FINISH
3	STONE VENEER
4	BRICK VENEER
5	STUCCO FINISHED TRIM
6	PRE-CAST TRIM
7	METAL RAILING
8	WOOD TRELLIS
9	WOOD RAFTER TAILS
10	FIBERGLASS COLUMN
11	CANVAS AWNING W/ METAL BRACKETS
12	METAL AWNING
13	SMOOTH CEMENTICIOUS PANEL
14	LIGHT FIXTURE

NORTH
SCALE

***Source*:** Mulvanny G2, 2010.

FIGURE **4.1-3**
Residential Concept Elevation 2

MM4.1-1 *To the extent feasible, the Applicant shall use nonreflective façade treatments, such as matte paint or glass coatings. Prior to issuance of building permits for the proposed project, the Applicant shall indicate provision of these materials on the building plans.*

Therefore, because light and glare impacts would not be increased over that anticipated previously, this impact would remain ***less than significant***.

4.1.4 Cumulative Impacts

The geographic context for the analysis of cumulative aesthetic impacts includes areas with views of the proposed project site. A cumulative impact analysis is provided only for those impacts where the revised project requires new impact analysis compared to the previous project. In the case of aesthetics, impacts to scenic resources, scenic vistas, and light and glare would not change. Therefore, this analysis accounts for cumulative impacts associated with the degradation of visual quality and character.

The revised project would consist of the same uses in the southern portion of the site that were analyzed previously and would include development of a Costco rather than mixed-uses in the northern portion. Though the proposed Costco would represent a change in use from what was previously approved for the project site, the big box commercial use would not represent a change of use compared to existing conditions. Other related projects in the area, including permitted development under the Beach-Edinger Specific Plan, would primarily include development of higher-density mixed-use projects. Both SP-13, which includes the project site, and the Beach-Edinger Specific Plan, which governs development in the area surrounding the project site, contain specific guidelines and policies to enhance the visual character and quality of the area. As a result, the overall area would not be subject to intrusive land uses that may disrupt the existing aesthetic quality of the area. Instead, such policies would generally allow new development to form a more cohesive aesthetic character compared to the fragmented character that currently exists. Therefore, implementation of the revised project in association with other potential renovation projects would result in changes to the existing environment that would enhance visual character and quality and a ***less-than-significant*** cumulative impact would occur.

4.1.5 Comparison of Impact Conclusions

A comparison of the revised project with the previous project is detailed individually for each potential impact in the discussions of aesthetics impacts provided above. The primary differences between the previous and revised project are (1) the inclusion of a big-box retail store in place of a portion of the previously considered mixed-uses, and (2) the demolition of the vacant Mervyns building and attached retail building, which were not included as part of the previous project. However, the uses proposed under the revised project are consistent with the commercial and retail uses that extend across the rest of the Bella Terra mall site and would have a consistent aesthetic quality due to proposed design standards. Implementation of the revised project would result in the same less-than-significant impacts associated with aesthetics and visual quality compared to the previous project. No new impacts or increased severity of previously identified impacts would result. No new mitigation is required.

The comparison of anticipated environmental impacts of the revised project with those identified for the previous project supports the required CEQA findings below. Specifically, none of the conditions set forth in Section 15162 of the 2010 CEQA Guidelines that would require preparation of a supplemental EIR has been met:

- The revised project would not result in new significant impacts to aesthetics, nor is there a substantial increase in the severity of impacts from that identified in the previous EIR.
- There is no information in the record or otherwise available that indicates there are substantial changes in circumstances pertaining to aesthetics that would require major revisions to the previous EIR.
- There is no substantial new information that would result in a new significant impact to aesthetics requiring major revisions of the previous EIR.
- There are no alternatives to the previous project or additional mitigation measures that would substantially reduce one of more significant impacts pertaining to aesthetics identified in and considered in the previous EIR.

4.2 AIR QUALITY

This Addendum section analyzes the potential for adverse impacts on air quality resulting from the revised project. This analysis includes impacts to both air quality and greenhouses gas and climate change. Impacts associated with the potential for the project to create objectionable odors affecting a substantial number of people would not change as a result of the revised project. Because the revised project would not create new odor impacts or substantially worsen odor impacts from those analyzed in the previous EIR. Data used to prepare this section were taken from various sources, including the South Coast Air Quality Management District (SCAQMD) *CEQA Air Quality Handbook*, and the 2007 Air Quality Management Plan (AQMP), as amended. Full bibliographic entries for all reference materials are provided in Section 4.2.5 (References) at the end of this section. In addition, Appendix B contains the air quality datasheets that were used to calculate data for this section.

4.2.1 Environmental Setting

The environmental setting of the project site and surrounding area, with the exception of the existing regional air quality, has not changed with respect to air quality as described in Section 4.2.1 of the previous EIR (pages 4.1-1 through 4.1-11). Because air quality monitoring has been continuous and ongoing since the previous analysis, the Existing Regional Air Quality section has been updated to incorporate the most current monitoring data.

Existing Regional Air Quality

Table 4.2-1 (Summary of Ambient Air Quality in the Revised Project Vicinity), and the associated discussion, has been updated to reflect the most current ambient air quality data available. The remaining Regional Air Quality discussion is identical to that documented in the previous EIR (Section 4.2.1 pages 4.2-8 through 4.2-9) and is not repeated here.

Table 4.2-1 identifies the national and state ambient air quality standards for relevant air pollutants, along with the ambient pollutant concentrations that have been measured at the Costa Mesa–Mesa Verde Drive monitoring station through the period from 2006 to 2008.

According to the air quality data shown in Table 4.2-1, the national and state 1-hour ozone standard has not been exceeded over the last three years in Source Receptor Area (SRA) 18. The national 8-hour ozone standard was exceeded on three days over the last three years. No national or state standards for CO, NO_2, or SO_2 have been exceeded over the last three years within SRA 18. State PM_{10} levels were found to be above the threshold fifteen times and federal levels for $PM_{2.5}$ exceeded thresholds levels established by the U.S. EPA approximately thirty-five times between 2006 and 2008.

Table 4.2-1 Summary of Ambient Air Quality in the Revised Project Vicinity

Pollutant/Standard	Number of Days Standards Were Exceeded and Maximum Ambient Concentrations During Such Violations					
	2006		2007		2008	
Ozone						
State 1-Hour ≥ 0.09 ppm	0	days	0	days	0	days
Max. 1-Hour Conc. (ppm)	0.07	ppm	0.082	ppm	0.094	ppm
State 8-Hour > 0.070 ppm	0	days	2	days		days
Federal 8-Hour > 0.075 ppm[a]	0	days	0	days	3	days
Max. 8-Hour Conc. (ppm)	0.064	ppm	0.072	ppm	0.079	ppm
Carbon Monoxide						
State 1-Hour > 20.0 ppm	0	days	0	days	0	days
Federal 1-Hour ≥ 35.0 ppm	0	days	0	days	0	days
Max 1-Hour Conc. (ppm)	4	ppm	5	ppm	3	ppm
State 8-Hour > 9.0 ppm	0	days	0	days	0	days
Federal 8-Hour ≥ 9. ppm	0	days	0	days	0	days
Max. 8-Hour Conc. (ppm)	3	ppm	3.1	ppm	2	ppm
Nitrogen Dioxide						
State 1-Hour ≥ 0.18 ppm	0	days	0	days	0	days
Federal 1-Hour ≥ 0.10 ppm	0	days	0	days	0	days
Max. 1-Hour Conc. (ppm)	0.05	ppm	0.07	ppm	0.08	ppm
State Annual ≥ 0.030 ppm	0	days	0	days	0	days
Federal Annual ≥ 0.053 ppm	0	days	0	days	0	days
Max. Annual Conc. (ppm)	0.0145	ppm	0.01320	ppm	0.0132	ppm
Sulfur Dioxide						
State 1-hour ≥ 0.25 ppm	0	days	0	days	0	days
Max 1-Hour Conc. (ppm)	0.01	ppm	0.01	ppm	0.01	ppm
State 24-hour ≥ 0.04 ppm	0	days	0	days	0	days
Federal 24-Hour > 0.014 ppm[b]	0	days	0	days	0	days
Max 24-Hour Conc. (ppm)	0.004	ppm	0.0010	ppm	0.0011	ppm
Federal Annual 0.03 ppm	0	days	0	days	0	days
Annual Average	0.0013	ppm	0.0010	ppm	.0011	ppm
Inhalable Particulates (PM_{10})						
State 24-Hour > 50 µg/m^3	7	days	5	days	3	days
Federal 24-Hour > 150 µg/m^3	0	days	0	days	0	days
Max. 24-Hour Conc. (µg/m^3)	104	µg/m^3	75	µg/m^3	61	µg/m^3
State Annual > 20 µg/m^3	*	days	*	days	*	days
Max. Annual Conc. (µg/m^3)	33.4	µg/m^3	31.0	µg/m^3	28.6	µg/m^3

Table 4.2-1 Summary of Ambient Air Quality in the Revised Project Vicinity

Pollutant/Standard	Number of Days Standards Were Exceeded and Maximum Ambient Concentrations During Such Violations					
	2006		2007		2008	
Inhalable Particulates ($PM_{2.5}$)						
Federal 24-Hour > 35 µg/m³	8	days	14	days	13	days
Max. 24-Hour Conc. (µg/m³)	56.2	µg/m³	79.4	µg/m³	67.9	µg/m³
State Annual > 12 µg/m³	*	days	*	days	*	days
Federal Annual > 15 µg/m³	*	days	*	days	*	days
Max. Annual. (µg/m³)	14.1	µg/m³	14.5	µg/m³	13.7	µg/m³

SOURCE: South Coast Air Quality Management District, SRA18, PM_{10}, and $PM_{2.5}$ data from SRA17, http://www.aqmd.gov/smog/historicaldata.htm, June 2010

ppm = parts per million; µg/m³ = micrograms per cubic meter

* Data not available

a. The federal 1-hour ozone standard of 12 ppm was revoked on June 15, 2005, and replaced with the federal 8-hour ozone standard.

b. On June 2, 2010, EPA established a new 1-hour sulfur dioxide standard of 75 ppm. Monitoring ambient sulfur dioxide concentrations for compliance with this new standard needs to be in place by January 2013.

4.2.2 Regulatory Framework

Air quality within the South Coast Air Basin (Basin) is addressed through the efforts of various federal, state, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. There have been updates and additions to the regulations surrounding air quality between the publication of the previous EIR and this Addendum. The following regulatory discussion includes only those regulations that have been added or changed since the previous EIR. All regulations documented in the previous EIR (Section 4.2.2 pages 4.2-11 through 4.2-17) have been incorporated into the following analysis.

The following lists regulatory authorities and regulations pertaining to criteria air pollutants, air quality, and greenhouse gases that have been addressed in detail in the previous EIR:

- United Stated Environmental Protection Agency
- Clean Air Act
- California Air Resources Board
- California Assembly Bill 1493
- Executive Order S-3-05
- Executive Order S-01-07
- Senate Bill 1386
- Senate Bill 1078
- City of Huntington Beach General Plan

The following information provides an update to the regulatory framework of greenhouse gases that was not available at the time of the previous EIR.

State

California Assembly Bill 32 (AB 32)

In 2006, the California State Legislature adopted AB 32, the California *Global Warming Solutions Act of 2006*. AB 32 focuses on reducing GHG in California. GHG as defined under AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires the California Air Resources Board (California ARB), the state agency charged with regulating statewide air quality, to adopt rules and regulations that would achieve greenhouse gas emissions equivalent to statewide levels in 1990 by 2020. On or before June 30, 2007, California ARB was required to publish a list of discrete early action GHG emission reduction measures that can be implemented by 2010. The law further requires that such measures achieve the maximum technologically feasible and cost effective reductions in GHGs from sources or categories of sources to achieve the statewide greenhouse gas emissions limit for 2020.

California ARB published its final report for Proposed Early Actions to Mitigate Climate Change in California, which described recommendations for discrete early action measures to reduce GHG emissions in October 2007. The measures included are part of California's strategy for achieving GHG reductions under AB 32. One of the sources for the potential measures includes the Climate Action Taskforce (CAT) Report. Three new regulations were proposed to meet the definition of "discrete early action greenhouse gas reduction measures," which include the following: a low-carbon fuel standard; reduction of HFC-134a emissions from nonprofessional servicing of motor vehicle air conditioning systems; and improved landfill methane capture (California ARB 2007). California ARB estimates that by 2020, the reductions from those three measures would be approximately 13-26 million metric tons of carbon dioxide equivalent.

Under AB 32, California ARB has the primary responsibility for reducing GHG emissions. California ARB has already made available a list of discrete early action GHG emission reduction measures. California ARB has also published a staff report titled California 1990 GHG Emissions Level and 2020 Emissions Limit (California ARB 2007) that determined the statewide levels of GHG emissions in 1990. The California ARB identified 427 MMT CO_2e as the total statewide aggregated GHG 1990 emissions level and 2020 emissions limit. Additionally, in December 2008, the California ARB adopted the Climate Change Scoping Plan, which outlines the State's strategy to achieve the 2020 GHG limit. This Scoping Plan proposes a comprehensive set of actions designed to reduce overall greenhouse gas emissions in California, improve the environment, reduce dependence on oil, diversify energy sources, save energy, create new jobs, and enhance public health. The plan emphasizes a cap-and-trade program, but also includes the discrete early actions.

California Code of Regulations Title 24

Although it was not originally intended to reduce greenhouse gases, California Code of Regulations Title 24 Part 6 (California's Energy Efficiency Standards for Residential and Nonresidential Buildings) were first established in 1978 in response to a legislative mandate to reduce California's energy consumption. The standards are updated periodically to allow consideration and possible incorporation

of new energy efficient technologies and methods. The latest amendments, made in October 2005, currently require new homes to use half the energy they used only a decade ago. Energy efficient buildings require less electricity, and electricity production by fossil fuels results in greenhouse gas emissions. Therefore, increased energy efficiency results in decreased production of greenhouse gas emissions.

The Energy Commission adopted 2008 Standards on April 23, 2008, and the Building Standards Commission approved them for publication on September 11, 2008. The 2008 updates became effective on August 1, 2009. The Energy Commission adopted the 2008 changes to the Building Energy Efficiency Standards for several reasons:

i. To provide California with an adequate, reasonably priced, and environmentally sound supply of energy
ii. To respond to AB 32, the *Global Warming Solutions Act of 2006*, which mandates that California must reduce its GHG emissions to 1990 levels by 2020
iii. To pursue California energy policy that energy efficiency is the resource of first choice for meeting California's energy needs
iv. To act on the findings of California's Integrated Energy Policy Report (IEPR) that concludes that the Standards are the most cost effective means to achieve energy efficiency, expects the Building Energy Efficiency Standards to continue to be upgraded over time to reduce electricity and peak demand, and recognizes the role of the Standards in reducing energy related to meeting California's water needs and in reducing GHG emissions
v. To meet the West Coast Governors' Global Warming Initiative commitment to include aggressive energy efficiency measures into updates of state building codes
vi. To meet the Executive Order in the Green Building Initiative to improve the energy efficiency of nonresidential buildings through aggressive standards

Executive Order S-13-08

On November 14, 2008, Governor Schwarzenegger issued Executive Order S-13-08, the Climate Adaptation and Sea Level Rise Planning Directive, which provides clear direction for how the State should plan for future climate impacts. Executive Order S-13-08 calls for the implementation of four key actions to reduce the vulnerability of California to climate change:

i. Initiate California's first statewide Climate Change Adaptation Strategy (CAS) that will assess the state's expected climate change impacts, identify where California is most vulnerable, and recommend climate adaptation policies
ii. Request that the National Academy of Sciences establish an expert panel to report on sea level rise impacts in California in order to inform state planning and development efforts
iii. Issue interim guidance to state agencies for how to plan for sea level rise in designated coastal and floodplain areas for new and existing projects
iv. Initiate studies on critical infrastructure projects and land-use policies vulnerable to sea level rise

The 2009 CAS report summarizes the best-known science on climate change impacts in the state to assess vulnerability and outlines possible solutions that can be implemented within and across state

agencies to promote resiliency. This is the first step in an ongoing, evolving process to reduce California's vulnerability to climate impacts (California Climate Change Portal 2009).

Senate Bill 97

SB 97, enacted in 2007, amends the CEQA statute to clearly establish that GHG emissions and the effects of GHG emissions are appropriate subjects for CEQA analysis. It directs the California Office of Planning and Research (OPR) to develop draft CEQA Guidelines "for the mitigation of GHG emissions or the effects of GHG emissions."

On April 13, 2009, OPR submitted the proposed amendments to the Secretary for Natural Resources. The Natural Resources Agency conducted formal rulemaking in 2009, certified the amendments in December 2009, and adopted and codified into law the amendments in February 2010. The amendments became effective in March 2010 and provide regulatory guidance with respect to the analysis and mitigation of the potential effects of GHG emissions.

Regional

South Coast Air Quality Management District

The SCAQMD is the agency principally responsible for comprehensive air pollution control in the Basin. To that end, the SCAQMD, a regional agency, works directly with the Southern California Association of Governments (SCAG), county transportation commissions, and local governments and cooperates actively with all federal and state government agencies. The SCAQMD develops rules and regulations, establishes permitting requirements for stationary sources, inspects emissions sources, and enforces such measures through educational programs or fines, when necessary.

The SCAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. It has responded to this requirement by preparing a sequence of air quality management plans (AQMPs). The most recent of these was adopted by the Governing Board of the SCAQMD on June 1, 2007, to update and revise the previous 2003 AQMP. The 2007 AQMP was prepared to comply with the federal and state *Clean Air Act*s and amendments, to accommodate growth, to reduce the high pollutant levels in the Basin, to meet federal and state ambient air quality standards, and to minimize the fiscal impact that pollution control measures have on the local economy. The purpose of the 2007 AQMP for the Basin is to set forth a comprehensive program that will lead the area into compliance with all federal and state air quality planning requirements. Compared with the 2003 AQMP, the 2007 AQMP utilizes revised emissions inventory projections that use 2003 as the base year, relies on the California ARB on-road motor vehicle emissions model EMFAC2007 and the SCAG 2004 Regional Transportation Plan (RTP) forecast assumptions, updates the attainment demonstration for the federal standards for ozone, replaces the 2003 attainment demonstration for the federal CO standard and provides a basis for a maintenance plan for CO for the future; and updates the maintenance plan for the federal NO_2 standard that the Basin has met since 1992. In terms of working towards ozone attainment, the 2007 AQMP builds upon the 2003 AQMP. In terms of PM_{10} and $PM_{2.5}$ attainment, the control

strategy in the 2007 AQMP has augmented the 2003 AQMP with a number of additional PM_{10} and $PM_{2.5}$ control measures.

The 2007 AQMP also addresses several state and federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. Specifically, the 2007 AQMP is designed to satisfy the California *Clean Air Act* (CCAA) tri-annual update requirements and fulfill the SCAQMD's commitment to update transportation emission budgets based on the latest approved motor vehicle emissions model and planning assumptions.

The 2007 AQMP control measures consist of (1) the District's Stationary and Mobile Source Control Measures, (2) California ARB's Proposed State Strategy, (3) District Staff's Proposed Policy Options to Supplement California ARB's Control Strategy, and (4) Regional Transportation Strategy and Control Measures provided by SCAG. Overall, there are thirty-one stationary and thirty mobile source measures that are defined under the 2007 AQMP. These measures primarily rely on the traditional command-and-control approach facilitated by market incentive programs, as well as advanced technologies expected to be implemented in the immediate future. The control measures in the 2007 AQMP are based on implementation of all feasible control measures through the application of available technologies and management practices, as well as advanced technologies and control methods.

The basic principles used in designing the District's control strategy were to (1) meet at least the same overall remaining emissions target of the 2003 SIP; (2) replace long-term measures with more specific near-term measures, where feasible; and (3) develop new short-term control measures and long-term strategies to achieve the needed reductions for attainment demonstration. Principal control measures of the 2007 AQMP focus on adoption of new regulations or enhancement of existing 2003 AQMP regulations for stationary sources and implementation/facilitation of advanced transportation technologies (i.e., zero emission and alternative-fueled vehicles and infrastructure; fuel cell vehicles; heavy-duty electric and hybrid-electric vehicles; and both capital and noncapital transportation improvements). Capital improvements consist of high-occupancy vehicle (HOV) lanes; transit improvements; traffic flow improvements; park-and-ride and intermodal facilities; and freeway, bicycle, and pedestrian facilities. Noncapital improvements consist of rideshare matching and transportation demand management activities derived from the congestion management program.

Programs set forth in the 2007 AQMP require the cooperation of all levels of government: local, regional, state, and federal. Each level is represented in the Plan by the appropriate agency or jurisdiction that has the authority over specific emissions sources. Accordingly, each agency or jurisdiction is associated with specific planning and implementation responsibilities. The Final 2007 AQMP was adopted by the AQMD Governing Board on June 1, 2007.

The SCAQMD staff has introduced an ongoing CEQA Significance Threshold Working Group in order to provide guidance to local lead agencies on determining significance from GHG emissions. Working Group members include government agencies implementing CEQA and representatives from various stakeholder groups that provide input to the SCAQMD staff on developing GHG CEQA significance thresholds.

In December 2008 the SCAQMD Governing Board adopted interim GHG significance thresholds for projects where the SCAQMD is the lead agency. These thresholds are applicable to stationary sources (as defined in the Clean Air Act) only and are not applicable to development projects such as the Bella Terra Expansion. Currently the SCAQMD is drafting significance thresholds with respect to project level GHG emissions however they have yet to publish or adopt any such thresholds.

4.2.3 Project Impacts and Mitigation

Analytic Method

The analysis in this section focuses on the nature and magnitude of the change in the air quality environment due to implementation of the revised project. The revised project would allow for development of 468 residential units, a 154,113-square-f00t (sf) Costco and associated tire center and fueling station available for customer use, and 30,000 sf of general retail use. Air quality impacts are estimated in relationship to the nearest schools and residential sensitive land uses, as the health of people on these properties may be adversely impacted if air emissions exceed a level deemed significant by federal or state agencies. The net increase in site emissions generated by the revised project has been quantitatively estimated and is compared to thresholds of significance recommended by the SCAQMD.

Construction Emissions

Construction emission sources from the revised project are similar in nature to the previous project. A detailed discussion of these sources is included in the previous EIR (page 4.2-18).

Operational Emissions

Operational emission sources anticipated from the revised project are similar in nature to the previous project. A detailed discussion of these sources is included in the previous EIR (page 4.2-18).

Localized Pollutant Concentrations for Construction

The background for Localized Significance Thresholds (LSTs) was discussed in detail in the previous EIR (page 4.2-19) and has not changed since the previous analysis. However, in compliance with recently revised SCAQMD guidance a newer dispersion model (AERMOD) was used to assess the impacts from construction of the revised project.

Localized CO Concentrations for Operation

The background for estimating mobile source concentrations of CO was discussed in detail in the previous EIR (page 4.2-19) and has not changed since the previous analysis. The revised analysis was limited to the one roadway segment that resulted in an Intersection Capacity Utilization (ICU) increase of more than 1 percent in the previous EIR. In 2030, the intersection of Beach Boulevard and Edinger Avenue resulted in an ICU increase of 0.03 (3 percent) and a level of service (LOS) D. Traffic emissions

for this intersection were evaluated using the CALINE4 dispersion model and traffic volumes provided in the subsequent traffic analysis.

Localized Toxic Air Contaminant Emissions

Toxic Air Contaminants (TACs) are airborne substances that are capable of causing chronic (i.e., of long duration) and acute (i.e., severe but of short duration) adverse effects on human health. They include both organic and inorganic chemical substances that may be emitted from a variety of common sources including gasoline stations, motor vehicles, dry cleaners, industrial operations, painting operations, and research and teaching facilities. TACs are different from the "criteria" pollutants previously discussed in that ambient air quality standards have not been established for them. The ISC3 dispersion model was used to evaluate the maximum individual cancer risks (MICR), highest chronic health index (HI), and excess cancer burden that are anticipated as a result of the implementation of the fueling stations at the Costco facility.

Greenhouse Gas Emissions/Climate Change

The background for greenhouse gas emissions was discussed in detail in the previous EIR (page 4.2-20) and, with the incorporation of the previously identified regulatory conditions and the incorporation of GHG analysis into CEQA, the background has not changed since the previous analysis.

However, in January 2009, OPR released preliminary proposed amendments to the CEQA Guidelines regarding GHG emissions. No significance threshold was included in the draft and the guidelines afford the customary deference provided to lead agencies in their analysis and methodologies. The introductory preface to the amendments recommends that California ARB set statewide thresholds of significance. OPR emphasized the necessity of having a consistent threshold available to analyze projects, and the analyses should be performed based on the best available information. The revisions would include a new section specifically addressing the significance of GHG emissions that would build upon OPR's 2008 technical advisory. Like the advisory, the proposed Guidelines section calls for quantification of GHG emissions. The proposed section states that the significance of GHG impacts should include consideration of the extent to which the project would result in the following: help or hinder compliance with AB 32 goals; increase energy use, especially when generated by fossil fuel combustion; improve energy efficiency; and result in emissions that would exceed any applicable significance threshold. In April 2009, OPR forwarded the draft revisions to the California Natural Resources Agency for review and proposed adoption. On December 30, 2009, the California Natural Resources Agency certified and adopted the CEQA Guidelines. The California Office of Administrative Law codified the CEQA Guidelines on February 16, 2010, and they became effective March 18, 2010. Appendix G of the CEQA Guidelines contains a sample checklist that may be used by lead agencies when considering environmental impacts. Two new checklist questions have been added for greenhouse gas emissions:

- Would the project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the project conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2010 CEQA Guidelines. For the purposes of this analysis, implementation of the revised project may result in a potentially significant impact if any of the following would result:

- Conflict with or obstruct implementation of the applicable air quality plan?
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
- Expose sensitive receptors to substantial pollutant concentrations?
- Generate greenhouse gas emissions, either directly or indirectly, that would have a significant impact on the environment?
- Conflict with any plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of greenhouse gases?

As the agency principally responsible for comprehensive air pollution control in the Basin, the SCAQMD recommends that projects should be evaluated in terms of air pollution control thresholds established by the SCAQMD and published in their CEQA Air Quality Handbook. The City utilizes the SCAQMD's thresholds that are in effect at the time a project is analyzed in order to assess the significance of quantifiable impacts. The City has identified the following thresholds as appropriate for the determination of impact significance.

Construction Emissions

The SCAQMD currently recommends that projects with construction-related emissions that exceed any of the following emissions thresholds should be considered significant. The SCAQMD also recommends that any construction-related emissions from individual development projects that exceed these thresholds be considered cumulatively considerable. These thresholds apply to individual development projects only; they do not apply to the emissions collectively generated by related projects:

- 550 pounds per day of CO
- 75 pounds per day of VOC
- 100 pounds per day of NO_X
- 150 pounds per day of SO_X
- 150 pounds per day of PM_{10}
- 55 pounds per day of $PM_{2.5}$

Operational Emissions

The SCAQMD recommends that projects with operational emissions that exceed any of the following emissions thresholds be considered significant. The SCAQMD also recommends that operational

emissions from individual projects that exceed these thresholds be considered cumulatively considerable. These thresholds apply to individual development projects only; they do not apply to the emissions collectively generated by related projects:

- 550 pounds per day of CO
- 55 pounds per day of VOC
- 55 pounds per day of NO_X
- 150 pounds per day of SO_X
- 150 pounds per day of PM_{10}
- 55 pound per day of $PM_{2.5}$

Cumulative Impacts

In order to assess cumulative impacts, the SCAQMD recommends that projects be evaluated to determine whether they would be consistent with 2007 AQMP performance standards and project-specific emissions thresholds. In the case of the revised project, air pollutant emissions would be considered to be cumulatively considerable if the new sources of emissions exceed SCAQMD project-specific emissions thresholds.

Localized Thresholds of Significance

LSTs are only applicable for construction emissions of CO, NO_2, PM_{10}, and $PM_{2.5}$. Thresholds of significance for localized concentrations were developed by comparing the highest ambient air quality measurements between 2006 and 2008 (as shown in Table 4.2-1) to the most stringent air quality standards. The difference is the maximum concentration of criteria air pollutants that the proposed project would be able to create without causing an exceedance in the ambient air quality standard. Therefore, the following LSTs apply to construction of the proposed project:

- 20 ppm (15 ppm maximum allowable project contribution) for 1-hour CO concentrations
- 9 ppm (5.9 ppm maximum allowable project contribution) for 8-hour CO concentrations
- 0.25 ppm (0.17 ppm maximum allowable project contribution) for 1-hour NO_2 concentrations

As the Basin is in nonattainment for PM_{10} and $PM_{2.5}$, the SCAQMD has established the following LST for PM_{10} and $PM_{2.5}$ concentrations during construction:

- 10.4 $\mu g/m^3$ for 24-hour PM_{10} concentrations
- 2.5 $\mu g/m3$ for 24-hour $PM_{2.5}$ concentrations

The SCAQMD has established the following threshold criteria to determine if a project has the potential to contribute to an exceedance of the state Ambient Air Quality Standards with respect to CO emissions from operational mobile sources:

- 20 ppm (15 ppm maximum allowable project contribution) for 1-hour CO concentrations
- 9 ppm (5.9 ppm maximum allowable project contribution) for 8-hour CO concentrations

Based on the methodology established by the Office of Environmental Health Hazard Assessment (OEHHA) and the SCAQMD, the following thresholds have been established to determine the MICR, HI, and cancer burden for the revised project.

- MICR—cancer risk of less than 10 in one million ($< 10 \times 10^{-6}$)
- HI—highest chronic health index of less than 1
- Cancer Burden—excess cancer burden within 1 square mile of less than 0.5

Greenhouse Gas Thresholds

An individual project cannot generate enough GHG emissions to individually influence global climate change. The revised project participates in this potential impact by its incremental contribution combined with the cumulative increase of all other sources of GHGs, which when taken together form global climate change impacts. Therefore, to determine the revised project's incremental contribution of GHG emissions to global climate change, this analysis focuses on the techniques and methodologies supported by OPR and the Current CEQA Guidelines including §15064(h)(3) and Appendix G. This approach results in an analysis of whether the impacts are cumulatively significant and, at the same time, consistent with AB 32.

AB 32 requires that greenhouse gases emitted in California be reduced to 1990 levels by the year 2020. The 2020 reduction target equates to a decrease of approximately 30 percent below business as usual (BAU) levels. BAU refers to emissions from a proposed project before project design features and other applicable emission reductions are applied. The significance threshold with respect to GHG emissions for the revised project is:

- Compliance with the AB 32 2020 reduction goal of 30 percent below BAU

Effects Not Found to Be Significant

Threshold	Would the project create objectionable odors affecting a substantial number of people?

Similar to the previous project, the revised project does not include uses that are significant sources of objectionable odors. Therefore, odors associated with construction and operation of the revised project would be ***less than significant***. No mitigation is required.

Impacts and Mitigation

Threshold	Would the project conflict with or obstruct implementation of the applicable air quality plan?

Impact 4.2-1 **Implementation of the revised project would create new sources of regional air emissions, but would not impair implementation of the Air Quality Management Plan. This impact would be *less than significant*, similar to the previous EIR.**

The 2007 AQMP was prepared to accommodate growth, to reduce high levels of pollutants within the areas under the jurisdiction of SCAQMD, to return clean air to the region, and to minimize the impact on the economy. Projects that are considered to be consistent with the AQMP would not interfere with attainment, because this growth is included in the projections used to formulate the AQMP. Therefore,

projects, uses, and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended daily emissions thresholds.

Projects that are consistent with the projections of employment and population forecasts identified in the Growth Management chapter of the Regional Comprehensive Plan and Guide (RCPG) are considered consistent with the AQMP growth projections. In turn, projects that are consistent with the City's General Plan are considered to be consistent with the Growth Management chapter, as the General Plan forms the basis for population and employment forecasts in the RCPG. This is because the Growth Management chapter forms the basis of the land use and transportation control portions of the AQMP.

The revised project site is currently planned for regional commercial and residential land uses under the 2008 General Plan Amendment. As approved under the previous GPA, a maximum of 713 residential units and 138,085 square feet (sf) of commercial space are currently allowed on the project site. The revised project would result in a decrease in number of residences (a total of 468 units) and an increase in commercial space (a total of 184,113 sf) which would result in a substantial decrease in population on the project site. This reduction would ensure that the revised project's impact is not greater than the less-than-significant impact identified for the previous project.

However, it is important to note that the current AQMP projections were based on the General Plan that was in effect prior to the 2008 General Plan Amendment (previous project). As such, what is allowed for on the site under the existing AQMP is a maximum of 396 residential units and 345,213 sf of commercial space. The revised project would result in a greater number of residences (468 units) than what was projected in the AQMP, but would reduce the amount of commercial uses on the site to 184,113 sf (an approximately 161,000 sf reduction). The revised project also includes an additional 90,895 sf of building slated for demolition, further reducing the amount of commercial uses on site. As such, the anticipated permanent population on the project site would be greater than was allowed during preparation of the AQMP. However, overall daily population would be reduced based on the reduction in commercial square feet. Therefore, while population as a result of the increase in residential units in the revised project would be greater than those projected by SCAG for the AQMP, the overall revised project would result in a less-than-significant impact. Furthermore, the AQMP is updated periodically based General Plan and land use information provided to SCAG. During the next update, information regarding the revised project will be submitted as the allowable land uses and the revised project will be considered consistent with the AQMP.

In order to evaluate the total changes (decrease in commercial use with an increase in residential units) that the revised project makes compared to information provided for the 2007 AQMP, an evaluation of total vehicle miles traveled (VMT) was conducted. VMT is a common metric by which to compare land uses. As shown in Table 4.2-2 (VMT Estimations), VMT estimations of the revised project are less than the previous project. Although there is an increase in population over what was projected in the 2007 AQMP due to an increase in the number of residential units, the reduction in commercial space and therefore VMT ensures that the revised project is in line with the projections as provided to SCAG. In addition, the revised project VMT is lower than what was anticipated under the previous project (2008 General Plan Amendment), making it consistent with the current General Plan. As previously discussed,

projects consistent with the City's General Plan are considered to be consistent with the AQMP. Therefore, development of the revised project would result in a ***less-than-significant*** impact with respect to conflicting with the existing AQMP, similar to the previous EIR.

Table 4.2-2 VMT Estimations

	AQMP Projections		*2008 General Plan Amendment*		*Revised Project*[a]	
Land Use	*du/ksf*[b]	*VMT*	*du/ksf*	*VMT*	*du/ksf*	*VMT*
Residential	396	26,885	713	48,406	468	4,722
Regional Commercial	345.21	110,273	138.09	44,111	30.00	4,136
Costco	0	-	0	-	154.11	32,382
Total		***137,158***		***92,517***		***41,241***

SOURCE: PBS&J 2020 (URBEMIS output sheets are provided in Appendix B)

a. Reduced Revised Project refers to the reductions in trip rates associated project features and applied mitigation.

b. du = dwelling units, ksf = thousand square feet, VMT = vehicle miles traveled

In addition, as discussed in the previous EIR, past residential projects within the City of Huntington Beach have not reached the full size projected in the 2007 AQMP. Many of these projects have been developed to 70 percent of the total allowable size with the City not reaching its full population potential within the time frame previously anticipated. As a result, the City's actual population increase has been below those projected by SCAG as well as the populations projected by the Department of Finance. Taking this into consideration, the growth anticipated as part of the revised project would fall well below the SCAG projections for population within the City of Huntington Beach, and would be well below the projections used in the 2007 AQMP. Based strictly on population increases, the revised project would have a slightly greater impact than previously analyzed Option 2, but would have less of an impact than previously analyzed Option 1, which was the basis for the 2008 General Plan Amendment.

Threshold	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Impact 4.2-2 **Peak construction activities associated with the revised project could generate emissions that exceed SCAQMD thresholds. However, the revised project would result in a *less-than-significant* impact without mitigation measures, a lesser impact than identified in the previous EIR.**

Estimated air emissions from the revised project's construction activities were calculated using the URBEMIS 2007 emissions model approved by California ARB. URBEMIS is a planning tool for estimating air emissions related to land use projects. The model incorporates mobile source emissions from the EMFAC 2007 computer model as well as the Institute of Transportation Engineers (ITE) trip generation rates for vehicle emission projections.

Construction activities associated with development under the revised project would generally involve five stages: (1) abatement and demolition, (2) excavation and shoring, (3) trenching, (4) construction (which includes pile driving and building and parking construction), and (5) final coating along with

landscaping improvements and paving activities. Construction is anticipated to be conducted in two stages. Stage 1 includes demolition and the construction of Phase 1 (the Costco development), and Stage 2 includes the construction of Phases 2 through 4 (the residential and additional retail development). Construction of Stages 1 and 2 would be substantially independent of one another. For a conservative analysis it was assumed that construction of Phase 1 would begin in 2010 with Phases 2 through 4 beginning within a month of completion of Phase 1.

The following standard code requirements (CR) (CR4.2-1 through CR4.2-5 in the previous EIR) shall be implemented, prior to issuance of any grading permit as part of the construction of the revised project to improve air quality emissions generated by construction activities.

CR5.2-1 *Prior to issuance of any grading permit, the name and phone number of the contractor's superintendent hired by the Applicant shall be submitted to the Departments of Planning and Public Works. In addition, clearly visible signs shall be posted on the perimeter of the site every 250 feet indicating who shall be contacted for information regarding this development and any construction/grading-related concerns. This contact person shall be available immediately to address any concerns or issues raised by adjacent property owners during the construction activity. S/he will be responsible for ensuring compliance with the conditions herein, specifically, grading activities, truck routes, construction hours, noise, etc. Signs shall include the Applicant's contact number regarding grading and construction activities, and "1-800-CUTSMOG" in the event there are concerns regarding fugitive dust and compliance with SCAQMD Rule No. 403.*

CR5.2-2 *Prior to issuance of any grading permit, the Applicant shall notify all property owners and tenants within 300 feet of the perimeter of the property of a tentative grading schedule at least 30 days prior to such grading.*

CR5.2-3 *Prior to issuance of any grading permit or surcharge activities, the Applicant shall demonstrate that the grading/erosion control plan will abide by the provisions of SCAQMD's Rule 403 as related to fugitive dust control.*

CR5.2-4 *Prior to issuance of any grading permit, wind barriers shall be installed along the perimeter of the site and/or around areas being graded.*

CR5.2-5 *As required by SCAQMD Rule 403—Fugitive Dust, all construction activities that are capable of generating fugitive dust are required to implement dust control measures during each phase of proposed project development to reduce the amount of particulate matter entrained in the ambient air. These measures include the following:*

- *Limiting the amount of area disturbed during site grading to 2 acres per day or less*
- *Application of soil stabilizers to inactive construction areas*
- *Quick replacement of ground cover in disturbed areas*
- *Covering all stock piles with tarp*
- *Reduction of vehicle speed on unpaved roads*
- *Watering of all disturbed areas a minimum of 3 times per day.*
- *Post signs on site, limiting traffic to 15 miles per hour or less*

- *Sweep streets adjacent to the proposed project site at the end of the day if visible soil material is carried over to adjacent roads*
- *Cover or have water applied to the exposed surface of all trucks hauling dirt, sand, soil, or other loose materials prior to leaving the site to prevent dust from impacting the surrounding areas*
- *Install wheel washers where vehicles enter and exit unpaved roads onto paved roads to wash off trucks and any equipment leaving the site each trip*

It is worth noting that as discussed in Chapter 2, during demolition and construction the project site will be watered four times daily under the revised project. This exceeds the requisite watering three times daily outlined in SCAQMD Rule 403 that is implemented by code requirement CR5.2-5.

Table 4.2-3 (Estimated Daily Construction Emissions [lbs/day]) shows the estimated construction emissions of the revised project with implementation of the above mentioned code requirements and project design features. As shown, estimated construction emissions of the revised project are below the established regulatory thresholds for all criteria pollutants. Therefore, construction impacts of the revised project would be ***less than significant***. This impact would be less than that identified under the previous EIR where construction level air quality impacts were identified as significant and unavoidable due to exceedances of the established thresholds for NO_X and VOC. A detailed breakdown of emissions for all sub-stages of the revised development is included in Appendix B.

Table 4.2-3 Estimated Daily Construction Emissions (lbs/day)

Emissions Source	Peak Day Emissions in Pounds per Day					
	VOC	NO_X	CO	SO_X	PM_{10}[a]	$PM_{2.5}$[a]
PHASE 1—COSTCO						
Exhaust	54.60	76.41	46.60	0.07	6.79	1.45
Fugitive Dust	0.00	0.00	0.00	0.00	3.02	3.29
Maximum Daily Emissions	***54.60***	***76.41***	***46.60***	***0.07***	***10.08***	***4.47***
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0	55.0
Significant Impact?	No	No	No	No	No	No
PHASES 2 THROUGH 4—MIXED USE						
Exhaust	19.90	68.19	59.40	0.07	3.08	2.84
Fugitive Dust	0.00	0.00	0.00	0.00	8.59	1.26
Maximum Daily Emissions	***19.90***	***68.19***	***59.40***	***0.07***	***9.06***	***4.10***
SCAQMD Thresholds	75.0	100.0	550.0	150.0	150.0	55.0
Significant Impact?	No	No	No	No	No	No

SOURCE: PBS&J 2010 (calculation sheets are provided in Appendix B)

Assumes the implementation of all code requirements and project design features.

Although not required to reduce construction emissions of the revised project below less-than-significant levels, the following mitigation measures (MM4.2-1 and MM4.2-2 of the previous EIR) would further

reduce construction-related emissions, specifically VOC emissions. Therefore, the revised project would result in a less-than-significant impact from construction emissions.

MM4.2-1 *During construction, operators of any gas or diesel fueled equipment, including vehicles, shall be encouraged to turn off equipment if not in use or left idle for more than 5 minutes.*

MM4.2-2 *The Applicant shall require by contract specifications that the architectural coating (paint and primer) products used would have a low VOC rating. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed by the City prior to issuance of a building permit.*

Threshold	Would the project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Impact 4.2-3 **Daily operation of the revised project could generate emissions that exceed SCAQMD thresholds. With the implementation of mitigation the revised project would result in a *significant and unavoidable* impact, similar to the previous EIR.**

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities of the revised project after occupation. Stationary area source emissions would be generated by the consumption of natural gas for space and water heating devices, and the operation of landscape maintenance equipment. Mobile emissions would be generated by the motor vehicles traveling to and from the revised project site.

Operational emissions are identified in Table 4.2-4 (Project Daily Operational Emissions). As shown, operational emissions, without the incorporation of project design features and mitigation measures, would result in significant impacts for VOCs and NO_X.

The location of the revised project, as an infill project in an already established urban area, will result in the reduction of trips from the existing transit and pedestrian amenities. This, coupled with mitigation measures MM4.2-3 and MM4.2-4 (MM4.2-3 and MM T-1 in the previous EIR respectively), will reduce impacts from operational emissions.

MM4.2-3 *The Applicant shall require by contract specifications that electrical outlets are included in the building design of the loading docks to allow use by refrigerated delivery trucks. The proposed project Applicant shall require that all delivery trucks do not idle for more than five minutes. If loading and/or unloading of perishable goods would occur for more than 5 minutes, and continual refrigeration is required, all refrigerated delivery trucks shall use the electrical outlets to continue powering the truck refrigeration units when the delivery truck engine is turned off.*

MM4.2-4 *The proposed project would provide plentiful short- and long-term bicycle parking facilities to meet peak demand (generally one bike rack space per 20 vehicle/employee space).*

MM4.2-5 *All retail and residential facilities shall ensure that current transit schedules are available in common areas for the use of employees and residents.*

Table 4.2-4 Project Daily Operational Emissions Without Mitigation						
	Emissions in Pounds per Day					
Emissions Source	*VOC*	*NO_X*	*CO*	*SO_X*	*PM_{10}*	*$PM_{2.5}$*
Mobile Sources						
Residential	10.88	13.51	113.82	0.13	20.87	4.03
Costco	30.00	43.31	348.25	0.40	66.68	12.87
Retail	3.86	5.53	44.48	0.05	8.52	1.64
Stationary Sources						
Natural gas	0.41	5.41	2.93	0.00	0.01	0.01
Landscaping	0.00	0.00	4.64	0.00	0.02	0.02
Consumer Products	21.37	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	1.88	0.00	0.00	0.00	0.00	0.00
Maximum Daily Emissions	***68.40***	***67.76***	***514.12***	***0.58***	***96.10***	***18.57***
Thresholds (lb/day)	55.0	55.0	550.0	150.0	150.0	55.0
Significant Impact	**Yes**	**Yes**	No	No	No	No

SOURCE: PBS&J 2010 (calculation sheets are provided in Appendix B)

MM4.2-6 *All retail facilities in excess of 150 employees shall provide preferential vanpool/carpool employee parking.*

MM4.2-7 *All retail facilities in excess of 150 employees shall be required to provide free parking passes to eligible employees.*

MM4.2-8 *All residential and nonresidential coatings applied during subsequent maintenance activities shall be required to be low VOC paints with a reduction of at least 20 percent.*

Table 4.2-5 (Project Daily Operational Emissions with Mitigation Measures) shows operational emissions after the incorporation of mitigation measures MM4.2-3 through MM4.2-8. Implementation of mitigation measures would help reduce operational emissions of NO_X and VOCs but would not reduce VOC emissions to a less-than-significant level. As no further feasible mitigation is available to reduce these emissions, this impact would remain ***significant and unavoidable***, similar to the previous EIR. It should be noted, however, that the revised project would result in the generation of less VOC than the previous project.

Table 4.2-6 (Operational Emissions—Revised Project Compared to Previous EIR Options) shows a comparison of the mitigated revised project emissions to the mitigated project emissions of either of the previous project options. Although the impact of the revised project remains significant and unavoidable with respect to VOC emissions, the revised project results in a reduced impact than was identified under the previous EIR.

Table 4.2-5 Project Daily Operational Emissions with Mitigation Measures

Emissions Source	Emissions in Pounds per Day					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Mobile Sources						
Residential	5.12	5.27	44.40	0.05	7.34	1.43
Costco	25.18	36.25	2.91	0.34	55.81	10.77
Retail	3.25	4.63	37.23	0.04	7.13	1.38
Stationary Sources						
Natural gas	0.34	4.46	2.41	0.00	0.01	0.01
Landscaping	0.00	0.00	3.71	0.00	0.01	0.01
Consumer Products	21.37	0.00	0.00	0.00	0.00	0.00
Architectural Coatings	1.50	0.00	0.00	0.00	0.00	0.00
Maximum Daily Emissions	***56.76***	***50.61***	***379.20***	***0.43***	***70.30***	***13.60***
Thresholds (lb/day)	55.00	55.00	550.00	150.00	150.00	55.00
Significant Impact	**Yes**	No	No	No	No	No

SOURCE: PBS&J 2010 (calculation sheets are provided in Appendix B)

Table 4.2-6 Operational Emissions—Revised Project Compared to Previous EIR Options

Emissions Source	Peak Day Emissions in Pounds per Day					
	VOC	NO_X	CO	SO_X	PM_{10}[a]	$PM_{2.5}$[a]
Previous Option 1	100.16	84.29	761.67	0.94	155.90	30.11
Previous Option 2	150.53	165.61	1541.20	1.93	320.51	61.84
Revised Project	***56.76***	***50.61***	***379.20***	***0.43***	***70.30***	***13.60***
SCAQMD Thresholds	55.0	55.0	550.0	150.0	150.0	55.0

SOURCE: PBS&J 2010 (calculation sheets are provided in Appendix B)

Assumes the implementation of all code requirements and mitigation measures.

Threshold	Would the project expose sensitive receptors to substantial pollutant concentrations?

Impact 4.2-4 **Implementation of the revised project would generate increased local traffic volumes, but would not cause localized CO concentrations at nearby intersections to exceed national or state standards. This impact would be *less than significant.***

Project-generated traffic could contribute to decreased LOS at nearby intersections, resulting in additional vehicle emissions and longer vehicle idling times at and near study area intersections. These circumstances could lead to CO hot spots that may affect adjacent sensitive receptors. The traffic analysis prepared for the revised project demonstrates a minimal increase in traffic over the previous project. Therefore, this analysis was limited to the one roadway segment that resulted in an ICU increase of more

than 1 percent from the previous EIR. In 2030, the intersection of Beach Boulevard and Edinger Avenue resulted in an ICU increase of 3 percent and an LOS D. Emissions related to traffic for this intersection were evaluated using the CALINE4 dispersion model and traffic volumes provided in the supplemental traffic analysis. Results of the analysis show that resulting CO emissions from this intersection would be 7.7 ppm when averaged over 1-hour and 5.0 ppm when averaged over 8 hours. These are well below the 20 ppm and 9 ppm respective regulatory thresholds. Therefore, similar to the previous project, this impact would be ***less than significant***.

Impact 4.2-5 **Construction activities associated with implementation of the revised project would generate emissions that could result in an exceedance of localized significance thresholds for CO, NO_2, PM_{10}, and $PM_{2.5}$ established by the SCAQMD. With the incorporation of code requirements and identified mitigation measures, the revised project would result in a *less-than-significant* impact for all pollutants of concern, which is a lesser impact than the previous project.**

As discussed under Impact 4.2-2, emissions from construction activities were estimated using the URBEMIS 2007 emissions model and are shown in Table 4.2-3. For the purposes of this analysis, all emissions shown in Table 4.2-3 are assumed to originate from the project site, including use of diesel-powered construction equipment. These on-site construction emissions were used in a dispersion model to estimate associated concentrations at the closest off-site sensitive receptors.

Sensitive receptors identified for the revised project include the residential properties north and south of the project site as well as several local schools, including Golden West College to the west of the project site as well as the Petra Christian Academy to the northeast and Montessori schools to the southeast of the project site.

LSTs have been developed by the SCAQMD to determine maximum allowable concentrations of criteria air pollutants during construction. Localized concentrations were estimated, as discussed in the Analytic Method section of this chapter and assume implementation of code requirements CR5.2-1 through CR5.2-5, as well as mitigation measures MM4.2-1 and MM4.2-2, which were also assumed under the previous project. Total LST construction emissions are presented in Table 4.2-7 (Total Construction Emissions and Localized Significance Thresholds CO and NO_X) and Table 4.2-8 (Total Construction Emissions and Localized Significance Thresholds PM_{10} and $PM_{2.5}$) and compared to LSTs for SRA 18. The maximum modeled concentrations are presented as measured at the fence line of the project site and each sensitive receptor.

As shown in Table 4.2-7 and Table 4.2-8, localized CO, NO_2, PM_{10}, and $PM_{2.5}$ would not exceed SCAQMD thresholds during proposed project construction at any of the identified sensitive receptors. This impact would be ***less than significant*** for all pollutants of concern. This is less substantial than the significant and unavoidable impact that was identified under the previous project.

Table 4.2-7 Total Construction Emissions and Localized Significance Thresholds CO and NO_X

Pollutant and Averaging Time	*Receptor Location*	*Background Air Quality (ppm)[a]*	*Maximum Incremental Project-Related Impact (ppm)*	*Total Impact (Background + Project) (ppm)*	*Most Restrictive Air Quality Standard (ppm)*	*Significant Impact?*
PHASE 1						
CO, 1-hour	Southern Residential	5	0.00435	5.00435	20	No
	Northern Residential	5	0.01024	5.01024	20	No
	Golden West College	5	0.00770	5.00770	20	No
	Petra Christian Academy	5	0.00523	5.00523	20	No
	Montessori School	5	0.00463	5.00463	20	No
CO, 8-hour	Southern Residential	3.1	0.00098	3.10098	9	No
	Northern Residential	3.1	0.00520	3.10520	9	No
	Golden West College	3.1	0.00207	3.10207	9	No
	Petra Christian Academy	3.1	0.00129	3.10129	9	No
	Montessori School	3.1	0.00095	3.10095	9	No
NO_2, 1-hour	Southern Residential	0.08	0.00049	0.08049	0.18	No
	Northern Residential	0.08	0.00054	0.08054	0.18	No
	Golden West College	0.08	0.00125	0.08125	0.18	No
	Petra Christian Academy	0.08	0.00059	0.08059	0.18	No
	Montessori School	0.08	0.00098	0.08098	0.18	No
PHASES 2 THROUGH 4						
CO, 1-hour	Southern Residential	5	0.00603	5.00603	20	No
	Northern Residential	5	0.00737	5.00737	20	No
	Golden West College	5	0.01010	5.01010	20	No
	Petra Christian Academy	5	0.00885	5.00885	20	No
	Montessori School	5	0.00677	5.00677	20	No
CO, 8-hour	Southern Residential	3.1	0.00163	3.10163	9	No
	Northern Residential	3.1	0.00184	3.10184	9	No
	Golden West College	3.1	0.00244	3.10244	9	No
	Petra Christian Academy	3.1	0.00294	3.10294	9	No
	Montessori School	3.1	0.00139	3.10139	9	No
NO_2, 1-hour	Southern Residential	0.08	0.00048	0.08048	0.18	No
	Northern Residential	0.08	0.00027	0.08027	0.18	No
	Golden West College	0.08	0.00115	0.08115	0.18	No
	Petra Christian Academy	0.08	0.00070	0.08070	0.18	No
	Montessori School	0.08	0.00100	0.08100	0.18	No

SOURCE: PBS&J 2010; AERMOD, Localized Significance Threshold Methodology (calculation data sheets provided in Appendix B).

Table 4.2-8 Total Construction Emissions and Localized Significance Thresholds PM_{10} and $PM_{2.5}$

Pollutant and Averaging Time	*Receptor Location*	*Maximum Incremental Project Related Impact (µg/m³)*	*Most Restrictive Air Quality Standard (µg/m³)*	*Significant Impact?*
		PHASE 1		
PM_{10}, 24-hour	Southern Residential	0.9311	10.4	No
	Northern Residential	8.8540	10.4	No
	Golden West College	2.8441	10.4	No
	Petra Christian Academy	1.1941	10.4	No
	Montessori School	0.8331	10.4	No
$PM_{2.5}$, 24-hour	Southern Residential	0.1088	2.5	No
	Northern Residential	1.1580	2.5	No
	Golden West College	0.4398	2.5	No
	Petra Christian Academy	0.1791	2.5	No
	Montessori School	0.1153	2.5	No
		PHASES 2 THROUGH 4		
PM_{10}, 24-hour	Southern Residential	1.7713	10.4	No
	Northern Residential	2.4098	10.4	No
	Golden West College	2.5188	10.4	No
	Petra Christian Academy	3.4485	10.4	No
	Montessori School	1.5003	10.4	No
$PM_{2.5}$, 24-hour	Southern Residential	0.1797	2.5	No
	Northern Residential	0.2845	2.5	No
	Golden West College	0.2818	2.5	No
	Petra Christian Academy	0.4024	2.5	No
	Montessori School	0.1735	2.5	No

SOURCE: PBS&J 2010; AERMOD, Localized Significance Threshold Methodology (calculation data sheets provided in Appendix B).

Local significance of the previous project was based on the worst-case construction impacts of Option 2. Option 1 was not evaluated for this impact because emissions from construction under Option 1 would be similar to and slightly less than those identified for Option 2. In addition, the previous analysis presented impacts for the closest sensitive receptors (residences to the north and south). As shown in Table 4.2-9 (Localized Impacts—Revised Project Compared to Previous EIR Options), the previous analysis resulted in localized significant impacts for $PM_{2.5}$ at the closest residential receptor but showed a less-than-significant impact with respect to CO, NO_X and PM_{10}. Table 4.2-9 compares the results from the previous analysis to the maximum impacts anticipated from the revised project. As shown, the revised project will result in no significant localized impacts with respect to the criteria pollutants of concern and therefore represents a lesser impact than the previous project.

Table 4.2-9 Localized Impacts—Revised Project Compared to Previous EIR Options

Emissions Source	Maximum Daily				
	CO (1-hr) (ppm)	CO (8-hr) (ppm)	NO_X (1-hr) (ppm)	PM_{10}[a] (µg/m³)	$PM_{2.5}$[a] (µg/m³)
Previous Project Option 2	0.37	0.05	0.36	8.7	3.4
Revised Project—Phase 1	***5.01***	***3.11***	***.081***	***8.85***	***1.52***
Revised Project—Phases 2 through 4	***5.01***	***3.10***	***.081***	***2.41***	***.40***
SCAQMD Thresholds	20	9	0.18	10	2.5

SOURCE: PBS&J 2010 (calculation sheets are provided in Appendix B)
Assumes the implementation of all code requirements and mitigation measures.

Impact 4.2-6 **Operational activities resulting from implementation of the gas station associated with the revised project would generate emissions that could result in unacceptable levels of cancer and health risks. Modeling for impacts from benzene emissions indicate that the associated health and cancer risks resulting from the revised project are *less than significant.***

A Health Risk Assessment (HRA) for the revised project was conducted by E-Tech Environmental for the determination of impacts to the local sensitive receptors from the operation of a gasoline fueling station at the proposed Costco (E-Tech Environmental 2010). The HRA is summarized here and is included in full as Appendix C. The gasoline facility is proposed to be located at the northwest corner of Beach Boulevard and Edinger Avenue and will operate 16 hours per day with sixteen pump stations. The facility is anticipated to dispense 16,000,000 gallons of gasoline annually, will be equipped with both Phase I and Phase II controls, and vent pipes will be fitted with pressure-vacuum relief valves.

Benzene, a component of gasoline, is the toxic air contaminates TAC of concern with respect to the operation of fueling stations. A sweet smelling, highly toxic hydrocarbon, benzene has been known to cause anemia and leukemia with long-term exposure to levels above those set by regulatory agencies. Breathing benzene can cause drowsiness, dizziness, rapid heart rate, headaches, tremors, confusion, and in severe cases unconsciousness and death.

As detailed in the HRA, benzene emissions as calculated result in MICRs of 6.636×10^{-6} for adjacent commercial receptors and 9.435×10^{-6} for the nearest sensitive receptor. Both the MICRs for the commercial and residential receptors are less than 10×10^{-6} and therefore are in compliance with SCAQMD thresholds.

The highest chronic health index was determined to be 0.0129 at the nearest commercial receptor, and 0.00543 at the nearest residential receptor. The highest reported acute health index is 0.0067 at the nearest commercial receptor, 0.0039 at the nearest residential receptor, and 0.0142 at another offsite location. All measured HIs are below 1 and therefore are in compliance with the established thresholds.

Using the highest MICR within 0.38 square mile (1 square kilometer) around the facility, the HRA estimated that the cancer burden from the implementation of the revised project would be 0.1344, which is less than the established threshold of 0.5.

Given the revised project is less than the established thresholds for MICRs, HIs, and cancer burdens, the revised project is ***less than significant*** with respect to impacts from the operation of a gasoline station associated with the Costco facility.

4.2.4 Cumulative Impacts

Threshold	Would the project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Impact 4.2-7 **Construction and operational emissions associated with the revised project would have the potential to result in a cumulatively considerable impact. With the incorporation of mitigation, impacts from operation of the revised project will exceed regulatory thresholds. The revised project will result in a *cumulatively considerable* impact for operational emissions, similar to the previous EIR.**

A significant cumulative impact may occur if a project would add a cumulatively considerable contribution of a federal or state nonattainment pollutant. Because the Basin is currently in nonattainment for ozone (for which VOC and NO_X are precursors) and PM_{10} under national and state standards, and is in nonattainment for CO under national standards, projects could cumulatively exceed an air quality standard or contribute to an existing or projected air quality exceedance. With regard to determining the significance of the proposed project's contribution, the SCAQMD neither recommends quantified analyses of cumulative construction or operational emissions, nor provides separate methodologies or thresholds of significance to be used to assess cumulative construction or operational impacts. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed using the same significance criteria as those for project-specific impacts. That is, individual development projects that generate construction-related or operational emissions that exceed the SCAQMD-recommended daily thresholds for project-specific impacts would also cause a cumulatively considerable increase in emissions for those pollutants for which the Basin is in nonattainment.

As identified under Impact 4.2-2, the revised project will not result in the exceedance of established emissions thresholds during construction activities. Therefore, construction emissions would not be cumulatively considerable and would result in a ***less-than-significant*** cumulative impact. As identified under Impact 4.2-3, operational activities are anticipated to result in a significant and unavoidable impact with respect to VOC emissions. Therefore, the emissions generated by operation of the revised project would be cumulatively considerable and would constitute a substantial contribution to an existing or projected air quality violation. As described under Impact 4.2-3, implementation of mitigation measures MM4.2-3 through MM4.2-8 would reduce these emissions, but not to a level below significance. Therefore, operation of the revised project would have a ***significant and unavoidable*** cumulative impact to air quality, similar to the impact identified in the previous EIR.

Threshold	Would the project generate greenhouse gas emissions, either directly or indirectly, that would have a significant impact on the environment?

Impact 4.2-8 **Implementation of the revised project would have the potential to contribute substantial emissions of greenhouse gases. With the incorporation of mitigation measures, impacts of the revised project will result in a *less-than-significant* impact, similar to the previous EIR.**

Implementation of the revised project would generate greenhouse gases through the construction and operation of new residential and commercial uses. Greenhouse gas emissions from the revised project would specifically arise from project construction and from sources associated with project operation, including direct sources such as motor vehicles, natural gas consumption, solid waste handling/treatment, and indirect sources such as electricity generation. Emissions from these sources are estimated and presented below. Following the SCAQMD recommendations, construction emissions are amortized over an anticipated 30-year project lifetime and added to the operational emissions to provide a complete average annual emissions estimate. Emissions of greenhouse gases are presented in terms of metric tons of CO_2 equivalents (MT CO_2e). CO_2e is the combination of all greenhouse gas impacts when normalized by comparing the effects of the impacts of each individual gas to that of a reference gas (CO_2). This metric allows for the representation of greenhouse gas impacts as a single number. Table 4.2-10 (Estimated Annual CO_2e Emissions) shows the estimated unmitigated GHG emissions with respect to the revised project.

Table 4.2-10 Estimated Annual CO_2e Emissions

Emission Source	*MT CO_2e*
Amortized Construction	86
Vehicular Use	8,818
Electricity	1,777
Natural Gas & other fuels	1,129
Solid Waste	21
Water Use	234
Total	***12,066***

SOURCE: URBEMIS 2007 was used to determine construction emissions. PBS&J calculation for operational emissions and URBEMIS output is included in Appendix B.

The location of the revised project, as an infill project in an established urban area, along with the implementation of state vehicle emission regulations, and mitigation measures MM4.2-6 through MM4.2-8 will result in the reduction of GHG emissions. These, coupled with the following mitigation measures, will reduce impacts from operational emissions to a less-than-significant level. It is worth noting that mitigation measures MM4.2-9 through MM4.2-11 are revised or enhanced versions of mitigation measures or Code requirements that were discussed in the previous EIR. MM4.2-9 is discussed in the previous EIR in Table 4.2-22 (Greenhouse Gas Emissions Reduction Mitigation Measures/Design Strategies—Option 1 and Option 2) with respect to the Solid Waste CAT Standard

which demonstrates that Huntington Beach achieved a 65 percent waste diversion rate by 2002. Mitigation measures MM4.2-10 and MM4.2-11 enhance the reductions identified in the previous EIR by strengthening them or identifying reduction goals. MM4.2-10 is an enhancement of MM D-17 (Landscaping) in the previous EIR. MM4.2-11 enhances previous mitigation measure MM E-19 to include outdoor water efficiency as well as indoor and provides a specific reduction percentage.

MM4.2-9 *Residential and Retail development shall implement waste reduction and recycling measures such that waste diversion from landfills equals 65 percent, the current City Standard for waste diversion.*

MM4.2-10 *Residential and Retail development shall use drought tolerant plants for landscaping. The following are suggestions to enhance the benefits of this measure. Evergreen trees on the north and west sides afford the best protection from the setting summer sun and cold winter winds. Additional considerations include the use of deciduous trees on the south side of the house that will admit summer sun; evergreen plantings on the north side will slow cold winter winds; constructing a natural planted channel to funnel summer cooling breezes into the house. Neighborhood CCR's not requiring that front and side yards of single-family homes be planted with turf grass. Vegetable gardens, bunch grass, and low –water landscaping shall also be permitted, or even encouraged.*

MM4.2-11 *Residential and Retail development shall implement water reduction features such that water usage is reduced by 20 percent. Water reduction features may include, but are not limited to:*

- *Installation of water conserving irrigation systems such that watering times can be varied and that the system will shut off during rain events*
- *Installation of water saving appliances*
- *Installation of low-flow showers and toilets*

MM4.2-12 *Residential and Retail developments shall implement energy saving measures such that natural gas usage is reduced to at least 15 percent below 2008 Title 24 standards. This could include, but is not limited to, the following:*

- *Use of light colored roofing material*
- *Planting trees appropriately to provide shading during the heat of the day*
- *Increase energy efficiency of insulation, doors, and windows*

MM4.2-13 *Electrical outlets shall be located outside in the front and rear of both residential and retail development such that 20 percent of landscaping equipment can be electrically powered.*

MM4.2-14 *Residential and Retail developments shall implement energy saving or incorporate renewable resources such that a minimum of 30 percent of the projects total electrical consumption is offset. Energy saving features may include, but are not limited to the following:*

- *Use of Energy Star appliances*
- *Use of energy saving lighting and light fixtures including dimmer switches, motion sensors, and timers*
- *Addition of photovoltaic cells to offset onsite electrical usage*
- *Instillation of energy efficient HVAC units*

Table 4.2-11 (Estimated Reduced Annual CO_2e Emissions) shows the annual emissions with incorporation of all of the above mitigation measures. GHG emissions from the construction and operation of the revised project would be reduced by 30.34 percent from business as usual (BAU) levels. This meets the AB 32 reduction threshold and therefore impacts from the revised project would be ***less than significant***, similar to the previous EIR.

Table 4.2-11 Estimated Reduced Annual CO_2e Emissions

Emission Sources	*Unmitigated MT CO_2e*	*Mitigated MT CO_2e*	*% Reduction*
Amortized Construction	86	86	0.00%
Vehicular Use	8,818	5,938	32.66%
Electricity	1,777	1,244	30.00%
Natural Gas & other fuels	1,129	928	17.82%
Solid Waste	21	21	0.00%
Water Use	234	187	20.00%
Total	***12,066***	***8,405***	***30.34%***

SOURCE: URBEMIS 2007 was used to determine construction emissions. PBS&J calculation for operational emissions and URBEMIS output is included in Appendix B.

Table 4.2-12 (Mitigated GHG Emissions Comparison of Revised and Previous Projects) shows the relationship between the revised project and the previous project. As indicated, with the incorporation of the mitigation measures, the revised project results in a lesser impact than anticipated from the previous project.

Table 4.2-12 Mitigated GHG Emissions Comparison of Revised and Previous Projects

Emission Source	*MT CO_2e*
Previous Project Option 1	18,370
Previous Project Option 2	35,611
Revised Project	***8,405***

SOURCE: PBS&J 2010

Threshold	Would the project conflict with any plan, policy, or regulation of an agency adopted for the purpose of reducing emissions of greenhouse gases?

Impact 4.2-9 **Project emission of greenhouse gases would have the potential to conflict with the implementation of AB 32. With the incorporation of mitigation impacts from the revised project will be *less than significant.***

As indicated in Impact 4.2-8, the revised project would result in a reduction of over 30 percent from BAU levels. In light of the characteristics and design features as well as the identified mitigation measures, the revised project would result in a ***less-than-significant*** impact on greenhouse gas

emissions and would comply with the goals and policies established by AB 32, similar to the previous EIR.

4.2.5 Comparison of Impact Conclusions

A comparison of the revised project with the previous project is detailed individually for each potential impact in the discussions of air quality and greenhouse gas impacts provided above. Implementation of the revised project could result in one new impact as compared to the previous EIR-a potential health risk from benzene emissions associated with the addition of a gas station as part of the proposed Costco. The addition of the gas station in the revised project introduces benzene emissions, a known carcinogen, within the immediate vicinity of the revised project. However, the analysis of benzene emissions from the gas station demonstrates that there would be a less-than-significant cancer and noncancer health risk to local sensitive receptors. Overall, the potential impacts of the revised project are similar to, or less than, those identified for the previous project.

While not an impact analysis, one additional difference between the analysis of the revised project and the previous project is the analytical method of GHG emissions. The methodology for assessing impacts from GHGs has changed since the analysis of the previous project and OPR has incorporated GHG-related thresholds into Appendix G of the 2010 CEQA Guidelines. Current methodology requires reductions with respect to GHG emissions to be in compliance with the current regulations and to determine significance from the quantitative evaluation of emissions. While additional analysis was conducted for the revised project, no new impacts were identified utilizing the new methodology.

The comparison of anticipated environmental impacts of the revised project with those identified for the previous project supports the required CEQA findings below. Specifically, none of the conditions set forth in Section 15162 of the 2010 CEQA Guidelines that would require preparation of a supplemental EIR has been met:

- The revised project would not result in new significant impacts to air quality, nor is there a substantial increase in the severity of impacts from that identified in the previous EIR.
- There is no information in the record or otherwise available that indicates there are substantial changes in circumstances pertaining to air quality that would require major revisions to the previous EIR.
- There is no substantial new information that would result in a new significant impact to air quality requiring major revisions of the previous EIR.
- There are no alternatives to the previous project or additional mitigation measures that would substantially reduce one of more significant impacts pertaining to air quality identified in and considered in the previous EIR.

4.2.6 References

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Intergovernmental Panel on Climate Change (IPCC). 2006. Chapter 3, Solid Waste Disposal. *2006 IPCC Guidelines for National Greenhouse Gas Inventories*. Prepared by the National Greenhouse Gas Inventories Programme, H.S. Eggleston, L. Buendia, K. Miwa, T. Ngara, and K. Tanabe (eds.).

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South Coast Air Quality Management District (SCAQMD). 1993. *CEQA Air Quality Handbook*.

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4.3 HAZARDS AND HAZARDOUS MATERIALS

This section assesses the potential for adverse impacts on human health and the environment from exposure to hazardous materials resulting from implementation of the revised project. Baseline conditions with respect to existing hazardous conditions remain substantially the same as when the 2008 Final EIR for The Village at Bella Terra was certified. The impact conclusions from the previous EIR are briefly summarized in this section and new analysis is presented for those impacts that have changed. Potential effects associated with the revised project include those associated with exposure to hazardous materials used, stored, transported, or disposed of during construction and operation of the proposed gas station associated with Costco. The following issues were scoped out of the previous EIR and do not require additional analysis: (1) impairment of emergency response plan implementation and (2) exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires. It should be noted that impacts with respect to airborne health risks are assessed in Section 4.2 (Air Quality).

Data used to prepare this section were taken from the *Preliminary Environmental Site Assessment—Phase I Update and Subsurface Assessment—Phase II* prepared by California Environmental Geologist and Engineers Inc. in September 2005 (Appendix F) and the *Air Dispersion Modeling and Health Risk Assessment* in June 2010 prepared by E-Tech Environment. Full bibliographic entries for all reference materials are provided in Section 4.3.5 (References) at the end of this section.

4.3.1 Environmental Setting

The environmental setting of the project site and surrounding area has not changed with respect to hazardous conditions as described in Section 4.6.1 of the previous EIR (pages 4.6-1 through 4.6-27).

4.3.2 Regulatory Framework

The regulatory framework as described in Section 4.6.2 of the previous EIR (pages 4.6-10 through 4.6-14) has not changed since certification of the Final EIR. However, additional regulations associated with the construction and operation of a gas station would be applicable.

State

State Water Resources Control Board Underground Storage Tank Regulations (CCR Title 23, Division 3, Chapter 16)

The provisions of SWRCB underground storage tank (UST) regulations are intended to protect the waters of the state from discharges of hazardous substances from underground storage tanks. These regulations establish construction requirements for new USTs, establish monitoring requirements for new and existing USTS, establish uniform requirements for unauthorized release report and for repair, upgrade, and closure of underground storage tanks, and specific variance request procedures. The Orange County Health Care Agency (OCHCA), Environmental Health Division implements and

enforces the provisions of this document, as the Certified Unified Program Agency for most cities in Orange County.

Local

Underground Storage Tank Program

The OCHCA, Environmental Health Division, oversees the underground storage tank inspection program in the City of Huntington Beach. As the Certified Unified Program Agency, Environmental Health is tasked by the California Secretary for Environmental Protection to implement and enforce underground storage tank codes.

Hazardous Materials Disclosure Program

The Huntington Beach Fire Department (HBFD) manages a Hazardous Materials Disclosure program within the City limits. The program's primary function is to help emergency responders identify, monitor, and assist business using or storing hazardous materials helping to reduce the probability of accidents involving hazardous materials. As a requirement of this program, affected businesses must complete and submit a Hazard Materials Disclosure Package to the Fire Department and periodically submit updates. Components of the Package include a Hazardous Materials Inventory and a Business Emergency Plan, among other forms. The revised project is subject to the requirements of this program as the gas station would use, store, and handle quantities of gas greater than 200 cubic feet in underground storage tanks.

Huntington Beach Fire Department City Specification No. 41, Installation of Underground Storage Tanks (Reference HBFC Chapter 34, NFPA 30 and CCR Title 23)

This specification provides guidance on the installation of underground storage tanks containing flammable or combustible liquid. In addition to the HBFD, other regulatory agencies are involved in UST installation including the OCHCA Environmental Health Division and the South Coast Air Quality Management District (SCAQMD).

4.3.3 Project Impacts and Mitigation

Analytic Method

The analysis in this section focuses on a comparison of the revised project and the previous project with regard to the potential for construction and operation of the project to result in the release of hazardous materials into the environment.

In terms of hazardous materials, the primary difference between the previous and revised project is the construction and operation of a gas station and the demolition of additional buildings, which were not part of the previous project. Unless stated otherwise, the term "revised project" in this hazards analysis refers to the potential effects of these land use changes. The construction and operation of the Costco

store itself would not introduce any new or additional chemicals compared to the commercial uses evaluated in the previous EIR.

Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2010 CEQA Guidelines. For purposes of this EIR, implementation of the proposed project may have a significant adverse impact if it would do any of the following:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within ¼ mile of an existing or proposed school
- Located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result create a significant hazard to the public or the environment
- Located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport and as a result in a safety hazard for people residing or working in the project area
- Located within the vicinity of a private airstrip and result in a safety hazard for people residing or working in the project area
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands

Effects Not Found to Be Significant

Threshold	Would the proposed project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

The project site does not currently, and would not in the foreseeable future, serve a function in any emergency response or evacuation plan. Consistent with the previous project, driveway access would be designed and constructed per City codes to allow adequate emergency vehicle access. Similar to the previous EIR, the revised project would not constrain implementation of the City's existing Emergency Management Plan. No impact would occur, and no further analysis is required.

Threshold	Would the proposed project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

The project site and surrounding area are characterized by features typical of the urban landscape and include retail-commercial uses. As stated in the previous EIR, no wildlands exist within the immediate vicinity of the project site. As such, the revised project would not result in the exposure of people or structures to hazards associated with wildland fires, consistent with the previous project. No impact would occur, and no further analysis of this issue is required.

Threshold	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?

The Joint Forces Training Center (JFTC) is an airfield located approximately 5 miles northwest of the project site at 11200 Lexington Drive within the City of Los Alamitos. Impacts associated with the project site's proximity to the JFTC, would remain the same as the previous project under implementation of the revised project. Future development under the revised project, consistent with the previous project, would place structures at the project site within the Height Restriction Zone for the JFTC. According to the AELUP, the ALUC has specified a height restriction of 200 feet above ground level for all of Orange County. CRF Title 14 Part 77.13 requires that any Applicant who intends to perform any construction or alterations to structures that exceed 200 feet in height above ground level must notify the FAA for project approval. However, the revised project would not involve the construction of structures in excess of 200 feet in height, and would therefore not require filing the project with the FAA. No new impact would occur, and no further analysis of this issue is required.

Revised Impacts and Mitigation Measures

Threshold	Would the proposed project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Impact 4.3-1 **Implementation of the revised project would involve the routine use, storage, transport, and disposal of hazardous materials, but no significant hazard to the public or the environment is anticipated to occur. Compliance with local, state, and federal regulations would ensure that this impact would remain *less than significant*, similar to the previous EIR.**

Potential effects associated with the construction and operation of commercial and residential uses were analyzed in the previous EIR. However, the revised project includes the construction and operation of a gas station that would require the installation of three USTs containing vehicle fuel, which is considered a

hazardous material. This could result in additional potentially hazardous effects that were not previously evaluated. The revised project would continue to be subject to established hazardous materials regulations intended to minimize the risk to human health and the environment from the routine use of hazardous substances.

Unlike the previous project, the revised project would construct and operate a gas station, increasing the amount of hazardous materials transported, stored, and dispensed on the project site. However, consistent with the previous project, construction activities at the project site may use certain hazardous materials in the form of paints, solvents, glues, roofing materials and other common construction materials, although in potentially incrementally different quantities than the previous project. These potentially hazardous materials may be transported to the site, and construction waste that may also contain hazardous materials, including those created by the demolition of the existing Mervyn's building, would be transported off-site for disposal. Appropriate documentation for all hazardous waste that is transported off-site would be provided as required to ensure compliance with the existing hazardous materials regulations. Adherence to these regulations, which requires compliance with all applicable federal and state laws related to the transportation of hazardous materials, would reduce potential impacts to a level that is ***less than significant***, consistent with the previous project.

In addition to the regulations described in the previous EIR, the revised project would also be subject to the requirements of State Water Resources Control Board (SWRCB) UST regulations (CCR Title 23, Chapter 16) and Huntington Beach Fire Department City Specification No. 41 (Installation of Underground Storage Tanks), which requires the completion of a Hazardous Materials Disclosure Packet and the acquisition of an operational permit for ongoing operation of an UST. City Specification No. 41 also provides guidance on the installation of the USTs. The Hazardous Material Disclosure Packet requires the submission of a number of forms including a Hazardous Materials Inventory and a Business Emergency Plan. The information included in the Hazardous Materials Disclosure Packet would ensure that in the event of any emergency incidents the HBFD could provide coordinated, effective response by having pertinent information available. The SWRCB UST Regulations, specifies design, construction and monitoring requirements for all new underground storage tanks. Consequently, compliance with applicable regulations would reduce potential health risks from on-site hazardous materials associated with implementation of the revised project (namely, the gas station) to a ***less-than-significant*** level, similar to the previous project.

As noted previously, impacts related to airborne health risks associated with implementation of the revised project are assessed in Section 4.2. Refer to Impact 4.2-6 for further discussion.

Consistent with the previous EIR, to ensure that workers and others at the project site are not exposed to unacceptable levels of risk associated with the use and handling of hazardous materials, employers and businesses are required to implement existing hazardous materials regulations, with compliance monitored by the state. Adherence to existing hazardous materials regulations would ensure compliance with existing safety standards related to the handling, use, and storage of hazardous materials, and compliance with the safety procedures mandated by applicable federal, state, and local laws and regulations.

Beyond the potential impacts of the proposed gas station, operation of the revised project would not result in the production of large amounts of hazardous waste. As noted above, construction of the revised project may generate hazardous and/or toxic waste. Federal, state, and local regulations govern the disposal of wastes identified as hazardous which could be produced in the course of demolition and construction. Asbestos, lead, or other hazardous materials encountered during demolition or construction activities would be disposed of in compliance with all applicable regulations for the handling of such waste, ensuring that the potential impacts of disposal of site-generated hazardous wastes would remain ***less than significant***, consistent with the previous project.

Threshold	Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment

Impact 4.3-2 **Implementation of the revised project could create a hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. This impact would remain *less than significant with mitigation incorporated*, similar to the previous project.**

Construction Effects

Demolition, grading and excavation activities for the revised project could result in the exposure of construction personnel and the public to previously unidentified hazardous substances in the soil, as disclosed in the previous EIR. Like the previous project, if any unidentified sources of contamination are encountered during demolition, grading, or excavation, the removal activities required could pose health and safety risks capable of resulting in various short-term or long-term adverse health effects in exposed persons.

In order to address the potential for encountering unknown contamination within the project area, mitigation measure MM4.3-1 (MM4.6-1 in the previous EIR) would minimize the potential risk of contamination by implementing investigation and remediation efforts at the project site. As such, the potential impacts associated with unknown contamination would be reduced to a ***less-than-significant*** level, consistent with the previous EIR.

MM4.3-1 *In the event that previously unknown or unidentified soil and/or groundwater contamination that could present a threat to human health or the environment is encountered during construction in the project area, construction activities in the immediate vicinity of the contamination shall cease immediately. If contamination is encountered, a Risk Management Plan shall be prepared and implemented that (1) identifies the contaminants of concern and the potential risk each contaminant would pose to human health and the environment during construction and post-development and (2) describes measures to be taken to protect workers, and the public from exposure to potential site hazards. Such measures could include a range of options, including, but not limited to, physical site controls during construction, remediation, long-term monitoring, post-development maintenance or access limitations, or some combination thereof. Depending on the nature of contamination, if any, appropriate agencies shall be notified (e.g., Huntington Beach Fire Department). If needed, a Site*

Health and Safety Plan that meets Occupational Safety and Health Administration requirements shall be prepared and in place prior to commencement of work in any contaminated area.

In addition to the previously proposed demolition of existing structures (Montgomery Ward buildings), the existing vacant Mervyns building and attached retail building would be demolished under the revised project. Demolition of all onsite structures could result in exposure of construction personnel and the public to hazardous substances such as asbestos and lead-based paints. Federal and state regulations, described in the previous EIR and applicable to the revised project, govern the renovation and demolition of structures where materials containing lead and asbestos are present.

Operational Effects

Implementation of mitigation measure MM4.3-1 and adherence to all federal, state, and local regulations would reduce potential impacts associated with the potential exposure to unknown hazardous materials through future project construction activities to a ***less-than-significant*** level by ensuring remediation of contaminated soils containing hazardous materials prior to development of the revised project, and by providing supplemental procedures in the event of unanticipated discoveries of contaminants.

Unlike the previous project, the revised project would include the installation and use of three USTs which would contain hazardous materials creating a potentially significant hazard to the public or the environment through reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment. However, compliance with the SWRCB UST Regulations which requires proper installation of UST tanks and implementation of a monitoring plan, as also required by the HBFD Hazardous Materials Disclosure Program, would reduce the potential for the accidental release of hazardous materials. The applicant would be required to submit a Business Emergency Plan as part of the Hazardous Materials Disclosure Packet submitted to the HBFD, as required by HBFD City Specification No. 41. Other potential operational effects associated with reasonably foreseeable upset or accident conditions involving the release of hazardous materials into the environment are not anticipated for the revised project, consistent with the previous EIR. Compliance with all applicable federal, state, and local regulations, including those described above, would reduce the probability of a major hazardous materials incident. The impact would remain ***less than significant***, similar to the previous EIR.

The project site is not located within a designated methane gas overlay district; however, it should be noted that petrogenic sources are not the sole source of methane gas and that biogenic sources, such as peat, are also capable of methane gas production. Peat and organic soil occurrences are estimated to be widespread in the City. Due to the potential for additional below-grade construction associated with the revised project, the potential for the accidental release of sub-surface methane may incrementally increase. Implementation of MM4.3-2 (MM4.6-2 from the previous EIR) would ensure that impacts are ***less than significant***, similar to the previous EIR. As part of this measure, the HBFD will require the Applicant to test for the presence of methane gas to determine if a problem exists and to rule methane out as a potential concern.

MM4.3-2 *Prior to the issuance of grading permits, the project shall comply with HBFD City Specification No. 429, Methane District Building Permit Requirements. A plan for the testing of soils for the*

presence of methane gas shall be prepared and submitted by the Applicant to the HBFD for review and approval, prior to the commencement of sampling. If significant levels of methane gas are discovered in the soil on the project site, the Applicant's grading, building and methane plans shall reference that a sub-slab methane barrier and vent system will be installed at the project site per City Specification No. 429, prior to plan approval. If required by the HBFD, additional methane mitigation measures to reduce the level of methane gas to acceptable levels shall be implemented.

Threshold	Would the proposed project emit hazardous emissions or handle hazardous or acutely hazardous material, substances, or waste within one-quarter mile of an existing or proposed school?

Impact 4.3-3 **Implementation of the revised project would result in the handling of acutely hazardous materials, substances, or waste within ¼ mile of a proposed school, but would not create a risk to human health from such activities. This impact would remain *less than significant*, similar to the previous EIR.**

Golden West College is located approximately 945 feet west, or within a ¼ mile, of the project site. Construction activities under the revised project would be consistent with the previous project and would involve the utilization of diesel-powered trucks and equipment, which would result in temporary diesel emissions that were determined to not represent a health hazard to students attending Golden West College, Perta Christian Academy, and Montessori School. No new impacts are anticipated. Unlike the previous project, operation of the revised project would include a sixteen-pump gas station, which would involve the handling, dispensing, and storage of hazardous materials on the project site. As noted previously, impacts related to airborne health risks associated with implementation of the revised project are assessed in Section 4.2 of this EIR. Refer to Impact 4.2-6 for further clarification. As stated in Impact 4.2-6, impacts related to airborne hazards associated with operation of a proposed gas station in the vicinity of sensitive receptors, including a school, would be ***less than significant***, consistent with the findings of the previous EIR.

Compliance with all applicable federal, state, and local laws and regulations, as described in the previous EIR, would regulate, control, or respond to hazardous waste, transport, disposal, or clean-up in order to ensure that hazardous materials do not pose a significant risk to Golden West College. If ground contamination is found at the project site before or during construction of future development, the implementation of mitigation measure MM4.3-1 would ensure the health and safety of all students, staff, and visitors at the College. Therefore, development of the revised project would result in a ***less-than-significant*** environmental impact related to the emissions or handling of hazardous materials within the vicinity of schools, consistent with the previous project.

Threshold	Would the proposed project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

Impact 4.3-4 **Implementation of the revised project would place the project site within a listed hazardous materials site compiled pursuant to Government Code Section 65962.5. This impact would remain *less than significant* with mitigation incorporated.**

As discussed in the previous EIR, the project site is located on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. With implementation of the revised project these conditions would remain the same.

Consistent with the previous EIR, future grading of the project site could encounter petroleum hydrocarbon-impacted soils. Complete removal of the impacted soils would require excavation to depths of 15 feet. Due to the additional construction activities that would occur under the revised project, the potential for disturbance of potentially impacted soils is considered incrementally greater. However, consistent with the previous project, removal of residual petroleum hydrocarbon contamination may be required by OCHCA. Such development would also trigger the need to complete a risk assessment with soil vapor data as the input parameter to evaluate future indoor air quality. Implementation of mitigation measure MM4.3-3 (MM4.6-3 from the previous EIR) would ensure compliance with the City's Specification No. 431-92. No additional recognized environmental conditions were ascertained in connection with the property.

MM4.3-3 *Prior to project implementation, the Applicant shall submit for approval a soil testing work plan to the HBFD. All native and imported soils associated with the proposed project site shall meet the standards outlined under the City's Specification No. 431-92 prior to the approval of grading plans and building plans by the HBFD. Additionally, all work at the project site shall conform to the City's Public Works Department requirements (i.e., haul route permits).*

Consistent with the previous EIR, implementation of mitigation measure MM4.3-1, MM4.3-2, and MM4.3-3 would reduce potentially significant impacts associated with the exposure of hazardous materials through construction activities associated with the revised project to a less-than-significant level by ensuring remediation of contaminated soils prior to development. Impacts would remain ***less than significant***, similar to the previous EIR.

4.3.4 Cumulative Impacts

Cumulative impacts under the revised project would remain substantially similar to the previous project. All new development would be subject to applicable federal, state, and local regulations during construction and operation in the County, ensuring that cumulative impacts of hazards and hazardous materials would be less than significant. Additionally, because the revised project would also be required to comply with applicable statutes and regulations, which would ensure that the project would not result in significant public hazards, and would implement the same mitigation measures as were previously

proposed, the additional contribution of the revised project's new gas station and three USTs would not be considered cumulatively considerable, and the cumulative impacts of the project would remain ***less than significant***, similar to the previous EIR.

4.3.5 Comparison of Impact Conclusions

A comparison of the revised project with the previous project is detailed individually for each potential impact in the discussions of hazards and hazardous materials impacts provided above. The primary differences between the previous and revised project are (1) the inclusion of a gas station that would require the installation of three UST's containing gasoline, which is considered a hazardous material, and (2) the demolition of the vacant Mervyns building and attached retail building, which were not included as part of the previous project. Implementation of the revised project would result in incrementally greater impacts due to the additional demolition and construction activities that would occur under the revised project and the operation of a gas station which would increase the amount of hazardous material handled, stored, transported, used, and distributed on-site. However, adherence to all applicable federal, state, and local recommendations, as well as implementation of mitigation measures identified in the previous EIR would ensure that all impacts would remain less than significant, consistent with the previous project. No additional mitigation measures are required beyond those identified in the previous EIR.

The comparison of anticipated environmental impacts of the revised project with those identified for the previous project supports the required CEQA findings below. Specifically, none of the conditions set forth in Section 15162 of the 2010 CEQA Guidelines that would require preparation of a supplemental EIR has been met:

- The revised project would not result in new significant impacts to hazards and hazardous materials, nor is there a substantial increase in the severity of impacts from that identified in the previous EIR.
- There is no information in the record or otherwise available that indicates there are substantial changes in circumstances pertaining to hazards and hazardous materials that would require major revisions to the previous EIR.
- There is no substantial new information that would result in a new significant impact to hazards and hazardous materials requiring major revisions of the previous EIR.
- There are no alternatives to the previous project or additional mitigation measures that would substantially reduce one of more significant impacts pertaining to hazards and hazardous materials identified in and considered in the previous EIR.

4.3.6 References

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4.4 LAND USE AND PLANNING

This section analyzes the potential for adverse impacts on the land use characteristics of the project site and adjacent areas resulting from implementation of the revised Village at Bella Terra/Costco project (revised project). Baseline conditions with respect to land use characteristics remain substantially the same as when the 2008 Final EIR for The Village at Bella Terra (referred to herein as the previous EIR) was certified. Full bibliographic entries for all reference materials are provided in Section 4.4.6 (References).

Impacts associated with the potential division of an established community and conflicts with applicable habitat conservation plans remain the same as evaluated for the previous project because the revised project does not interfere with an established community and there are no habitat conservation plans applicable to the site. These impact conclusions from the previous EIR are briefly summarized in this section although no new analysis is presented.

4.4.1 Environmental Setting

The environmental setting of the project site and surrounding area has not substantially changed with respect to land use features and characteristics as described in Section 4.8 of the previous EIR (pages 4.8-1 through 4.8-3). The primary difference in the setting is that the revised project site is larger because it now encompasses a vacant 82,000-square-foot (sf) retail building formerly occupied by Mervyns and an adjacent vacant 8,895 sf retail building in the northeastern portion of the site, which were not included as part of the previous project. Although the site is larger than previously analyzed, the characteristics of the overall site have not changed because the additional vacant buildings were included as part of the immediate surrounding area in the previous EIR.

4.4.2 Regulatory Framework

The following regulatory discussion includes only those regulations that have changed since adoption of the previous EIR. Although not mentioned here, all regulations documented in Section 4.8.2 of the previous EIR (pages 4.8-3 through 4.8-4) have been incorporated into the following analysis.

Regional

Southern California Association of Governments (SCAG)

In addition to the Regional Comprehensive Plan (RCP), Regional Transportation Plan (RTP), and Regional Housing Needs Assessment (RHNA) that were identified in the previous EIR, SCAG also released the 2008 Compass Growth Visioning Principles. The principles are identified in Impact 4.4-1 and a new consistency analysis is provided.

Local

Specific Plan No. 13

Specific Plan No. 13 (SP-13) (the Bella Terra Specific Plan), which was adopted in August 2000 and revised in November 2008 concurrent with approval of the previous project, serves as the zoning document for the project site and the existing Bella Terra Mall. This document establishes the planning concept, design theme, development regulations, and administrative procedures necessary to achieve an orderly and compatible development of the project area and to implement the goals, objectives, and policies of the Huntington Beach General Plan.

Implementation of the revised project would amend the General Plan Land Use section and SP-13 and would result in the realignment of the dividing line between Area A and Area B of the Specific Plan. The proposed amendment would transfer approximately 5.45 acres from Area B to Area A. This amendment would result in an increase in area and use of commercial-only development within Area A and a reduction in commercial area and residential units (from 713 to 468 units) within Area B. The amendment would also permit big-box and fuel station uses and establish design and development standards for big-box retail and fuel station uses within Area A.

4.4.3 Revised Project Impacts and Mitigation

Analytic Method

The analysis in this section addresses the compatibility of land uses identified in the revised project with existing and planned land uses adjacent to the project site. Consistency with applicable policies pertaining to land use is addressed.

The revised project comprises a 154,113 sf Costco with associated sixteen-pump gas station, and a mixed-use development consisting of 468 residential units and 30,000 sf of general retail uses. The previous EIR evaluated the potential effects of a higher intensity mixed-use project. Therefore, the mixed-use portion of the revised project has already been adequately analyzed. With respect to land use issues, the primary difference between the previous and revised project is the construction and operation of a Costco center. Unless stated otherwise, the term "revised project" in this analysis refers to the potential effects of the Costco warehouse and ancillary uses.

Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2010 CEQA Guidelines. For purposes of this EIR, implementation of the revised project may have a significant adverse impact if it would do any of the following:

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect

- Conflict with any applicable habitat conservation plan or natural community conservation plan
- Physically divide an established community

Effects Not Found to Be Significant

Threshold	Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?

There are no applicable habitat conservation plans or natural community conservation plans that cover the revised project site. The land is currently developed with limited landscape or natural features. No impact would result, and no further analysis of this issue is required in this Addendum EIR, similar to the previous project.

Threshold	Would the project physically divide an established community?

The revised project would not disrupt or physically divide an established community. The revised project involves the redevelopment of an existing vacant commercial center with a mix of residential and commercial uses. The revised project would not cut off an existing or proposed transportation route. Therefore, no impacts would occur, and no further analysis is required in this Addendum EIR, similar to the previous project.

Revised Impacts and Mitigation Measures

Threshold	Would the project conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Impact 4.4-1 **The revised project consists of a new General Plan Amendment (GPA) and Zoning Text Amendment (ZTA) that would transfer approximately 5.45 acres from Area B to Area A in Specific Plan No. 13. Implementation of the revised project would not conflict with applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. Similar to the previous project, this impact is *less than significant*.**

Proposed Land Use Changes

The revised project consists of a new GPA and ZTA that would result in the realignment of the dividing line between Areas A and B of SP-13, which would transfer approximately 5.45 acres from Area B to Area A. More specifically, the General Plan would be amended as follows: Area A would increase from approximately 46.90 acres to approximately 52.35 acres and Area B would decrease from approximately 15.85 acres to approximately 10.4 acres (a 5.45-acre difference). Figure 2-4 (Existing SP-13 Designation Area) and Figure 2-5 (Proposed SP-13 Designation Area) illustrate the existing and proposed alignment

of SP-13. The associated ZTA would amend SP-13 to increase the acreage in the Area A portion and correspondingly decrease acreage in Area B. The ZTA would also permit big-box and fuel station uses and establish associated design and development standards for such uses within Area A. The Area B mixed-use overlay would remain the same as previously analyzed but would be reduced from approximately 15.85 acres to approximately 10.4 acres with a maximum of 468 residential units and 30,000 sf of retail. The FAR would remain the same for Area A and Area B as what is currently permitted.

Effects of Land Use Redesignation

Implementation of the revised project would result in a GPA/ZTA that would increase the area and use of commercial-only development within Area A and reduce the land area available for mixed-uses within Area B. The revised project would consist of the same mixed-uses in the southern portion of the site that were analyzed previously, although to a lesser degree. The previous project (as permitted by the approval of Option 1) allowed for 713 residential units and 138,085 sf of commercial uses on approximately 15.85 acres. In contrast, the revised project would reduce this mixed-use portion to permit a maximum of 468 residential units and 30,000 sf of commercial uses on approximately 10.4 acres. Because the revised project would permit the same type of mixed-uses but with a reduced maximum square footage on the southern portion of the site than was studied in the previous EIR, this portion of the revised project is considered to have been fully analyzed in the previous EIR.

The primary differences between the previous and revised project is the proposed development of a Costco center with gas station rather than mixed-uses in the northern portion of the site and the addition of acreage to the project site to accommodate the new uses. The mixed-uses that were previously proposed for this area would be eliminated, and additional buildings that were not part of the previous project would be demolished in order to provide enough land area for the Costco.

The introduction of the big-box retail use would represent a change in use from what was previously approved for the project site as well as what has been approved for the surrounding area as part of the Beach-Edinger Corridor Specific Plan. The revised project site is not included within the boundary of the Beach-Edinger Corridor Specific Plan; however, the Edinger segment is generally planned for more intensive mixed-use development. In particular, this segment is intended to act as a Town Center, or hub, with new development configured in a pattern that would make walking a viable option and to accommodate a wider range of uses than currently exist with the commercial-only strip centers. The mixed-use development in the southern portion of the project site along Edinger Avenue would continue to complement this vision for growth and change in the area. However, the development of big-box commercial and gas station uses along Center Avenue, although not in conflict with the overall vision, would not necessarily promote the intended change for the surrounding area either.

With consideration given to the previous discussion, the big-box commercial and gas station uses would not represent a substantial change of use compared to existing conditions. Although currently vacant, the project site is developed with a former Montgomery Ward department store and associated auto repair facility and a Mervyn's department store. Development of a Costco with gas station would represent a continuation of commercial-only uses. Future residents of the (southern portion of the) project site and

surrounding area would have fewer small, commercial retail uses available at the project site, which could reduce the envisioned walkability of the site itself; however, the Costco center would provide a stable commercial anchor tenant for the area. Further, the Costco center could be an additional attraction for the patrons at the existing Bella Terra mall, consistent with the mixed-use ideal.

Given the similarity between the revised project and the existing land use types, the revised project would be compatible with adjacent land uses and would not cause a substantial adverse change in the existing land use pattern of the project area. A discussion of project compatibility with relevant land use goals and policies associated with SCAG and the City's General Plan Land Use Element follows. Generally, the City's land use policies encourage projects that provide a mix of uses, are compatible and harmonious with surrounding development, and offer pedestrian amenities that enhance the image and quality of life and the environment. Policies are designed to address the image of the community and promote compatibility between land uses. Future development under the revised project would promote the City's image as a regional activity center that would provide the community and region with economic and service benefits. Additionally, the project site is located near the Golden West Transportation Center and the I-405, providing commercial and mixed-use development that is regionally visible and accessible via multiple modes of transportation.

SCAG RHNA

RHNA Resolution 07-489-01 The Final RHNA establishes the total regional housing need allocation of 699,368 housing units by June 30, 2014.

Consistency Analysis

In conformance with the allocated housing need identified by SCAG, the City of Huntington Beach's adopted 2008–2014 Housing Element of the General Plan was certified by the State Department of Housing and Community Development (HCD) in 2008. It identifies the City's proportional responsibility for future residential growth through 2014. Implementation of the revised project would result in a reduction of residential units (from 713 to 468) but residential and commercial mixed-uses would still be permitted on Area B. Although implementation of the revised project would result in a reduction of units, the City's Housing Element demonstrates a sufficient residential potential to more than meet the City's RHNA allocation of 2,092 housing units. Development of the revised project would not hinder the City's ability to meet the RHNA allocation identified by SCAG. Therefore, implementation of the revised project would not conflict with SCAG RHNA Resolution 07-489-01.

SCAG 2008 RTP

The 2008 RTP provides a regional investment framework to address the region's transportation and related challenges through the year 2035. SCAG identified regional goals that reflect a balanced approach to transportation planning and decision-making. Those RTP Goals that are most applicable to the revised project are identified below.

- Maximize mobility and accessibility for all people and goods in the region
- Protect the environment, improve air quality and promote energy efficiency

- Encourage land use and growth patterns that complement our transportation investments and improve the cost effectiveness of expenditures

Consistency Analysis

Although implementation of the revised does not include any direct changes to the existing transportation system in the project area or vicinity, the mere implementation of permitted mixed-use and regional commercial development on the project site is reflective of the above listed RTP goals. Although the proposed Costco center would represent a change in land use compared to the previous project, the development of such a big-box use would not be vastly different from the existing (former) commercial uses on the site and would complement surrounding land uses. Mixed-use development would still be permitted on Area B.

Mixed-use projects encourage alternative modes of transportation by allowing more live-work opportunities to reduce automobile trips and subsequently help to improve regional air quality. Additionally, the project site is located adjacent to the Golden West Transportation Center, which would provide increased opportunities for alternative transportation methods. Therefore, by permitting a mixed-use development to occur on Area B and complementary commercial uses on Area A, the revised project would not conflict with the RTP goals.

SCAG 2008 RCP

SCAG policies are not mandated; rather, they are generally used for regional advisory purposes. However, because implementation of the proposed GPA/ZTA would permit increased mixed-use density on the project site, a brief discussion of the project's consistency with the RCP policies is provided below.

RCP Policy LU-5 Local governments should provide for new housing, consistent with State Housing Element law, to accommodate their share of forecast regional growth.

RCP Policy LU-7.2 Developers and local governments should integrate green building measures into project design and zoning such as those identified in the U.S. Green Building Council's Leaderships in Energy and Environmental Design, Energy Star Homes, Green Point Rated Homes, and the California Green Builder Program.

RCP Policy LU-7.4 Local governments and sub regional organizations should develop adaptive reuse ordinances and other programs that will enable the conversion of vacant or aging commercial, office, and some industrial properties to housing and mixed-use with housing.

RCP Policy LU-2S SCAG shall continue efforts, in collaboration with State agencies and local jurisdictions, to significantly reform State Housing Element law and the Regional Housing Needs Assessment process. These reforms should promote the

broad goals stated by the Secretary of Business, Transportation, and Housing and shared by SCAG:

- Each municipality has a clear responsibility to provide housing based on the growth in population and jobs generated in the community.
- Jurisdictions should be able to collaborate in meeting housing needs.
- Planning for housing should be pursued over a longer time frame in line with other major growth planning efforts.

Consistency Analysis

Similar to the previous project, the revised project would focus growth within a known Redevelopment Area and along a major commercial corridor. The revised project would facilitate the expansion of the existing Bella Terra Mall and provide a new commercial area and a mixed-use community that would replace an aging and vacant commercial site. Although the proposed Costco center would represent a change in land use compared to the previous project, the development of such a big-box use would not be vastly different from the existing (former) commercial uses on the site and would complement surrounding land uses. Mixed-use development would still be permitted on Area B. Consequently, implementation of the revised project would not conflict with the RCP policies identified above.

SCAG 2008 Compass Growth Visioning Principles

Principle 1	Improve mobility for all residents	
	GV P1.1	Encourage transportation investments and land use decisions that are mutually supportive.
	GV P1.2	Locate new housing near existing jobs and new jobs near existing housing.
	GV P1.3	Encourage transit-oriented development.
	GV P1.4	Promote a variety of travel choices.
Principle 2	Foster livability in all communities	
	GV P2.1	Promote infill development and redevelopment to revitalize existing communities.
	GV P2.2	Promote developments which provide a mix of uses.
	GV P2.3	Promote "people-scaled," walkable communities.
	GV P2.4	Support the preservation of stable, single-family neighborhoods.
Principle 3	Enable prosperity for all people.	
	GV P3.1	Provide, in each community, a variety of housing types to meet the housing needs of all income levels.

	GV P3.2	Support educational opportunities that promote balanced growth.
	GV P3.3	Ensure environmental justice regardless of race, ethnicity, or income class.
	GV P3.4	Support local and state fiscal policies that encourage balanced growth.
	GV P3.5	Encourage civic engagement.
Principle 4	Promote sustainability for future generations.	
	GV P4.1	Preserve rural, agricultural, recreational, and environmentally sensitive areas.
	GV P4.2	Focus development in urban centers and existing cities.
	GV P4.3	Develop strategies to accommodate growth that use resources efficiently, eliminate pollution and significantly reduce waste.
	GV P4.4	Utilize "green" development techniques.

Consistency Analysis

The revised project is a commercial and mixed-use development that would be constructed on a previously developed commercial site. The revised project involves infill development, which helps to limit sprawl, reduce pollution, and promote efficient development that minimizes travel and congestion. The revised project would include development of a big-box retail store (Costco) in place of a portion of the mixed-use development that was previously analyzed on the northern portion of the project site. In the southern portion of the site along Edinger Avenue, mixed-uses would still be developed.

By creating walkable, "people-scaled" mixed-use development on Area B, new multifamily housing opportunities would be created in the community, supporting the City's projected housing needs, and potential residents could take advantage of on-site and adjacent commercial uses, as well as nearby transit linkages at the Golden West Transportation Center. As a result, future residents and patrons would have access to alternative means of transportation. The creation of the big-box retail and mixed-use development near existing commercial and mixed-use areas would encourage pedestrian activity and reduce dependence on automobiles through the implementation of a mixture of land uses. In addition, proposed plans for the mixed-use development promote the use of alternative transit methods through the incorporation of bus turnouts, bicycle facilities, and integrated pathways toward existing commercial and transit uses, where feasible.

Growth related to the revised project will occur in an area previously planned to accept growth; a goal of the project to revitalize an existing commercial center that will help sustain the City's economic vitality, providing new employment opportunities while generating sufficient revenues for ongoing City operations, infrastructures and public services. The revised project would be consistent with all City policies and regulations regarding sustainable and green building standards, principles, and practices.

Implementation of the revised project would not conflict with the RCP SCAG 2008 Compass Growth Visioning Principles identified above.

City of Huntington Beach Urban Design Element

Goal UD 1.1 Enhance the visual image of the City of Huntington Beach

Policy UD 1.2.1 Require public improvements to enhance the existing setting for all key nodes and pedestrian areas through the consideration of the following:

a. provide pedestrian connections and visual continuity between the node and the surrounding neighborhoods
b. N/A
c. N/A
d. N/A
e. enhance the connections, where feasible, between the public sidewalk and private commercial interior open spaces/courtyards as described in the Land Use Element by using decorative paving and landscaping materials, and street furniture
f. incorporate landscaping to mask oil operations and major utilities, such as the Edison generating station

Policy UD 1.3.1 Require a consistent design theme and/or landscape design character along the community's corridors that reflects the unique qualities of each district. Ensure that streetscape standards for the major commercial corridors, the residential corridors, and primary and secondary image corridors provide each corridor with its own identity while promoting visual continuity throughout the City.

Consistency Analysis

The project site is considered an internal node in the City as it was originally part of Huntington Center. As discussed in the City's General Plan, this area previously lacked the visual characteristics that defined it as an entryway. However, subsequent redevelopment of the Bella Terra Mall has helped to clearly define the area as a point of entry into the City.

Implementation of the revised project would further enhance the distinctive character and identity of the area by providing complementary development with a consistent design theme in connection with the existing Bella Terra Mall. The revised project site would be designed to encourage residents to utilize the existing surrounding features and land uses in the area such as retail and entertainment uses at Bella Terra Mall as well as transportation opportunities at the Golden West Transportation Center. The revised project would incorporate design guidelines that would adhere to City standards (including streetscape standards) and include substantial landscaping to soften the hardscape. Landscaping would cover approximately 10 percent of the Costco portion and 44 percent of the mixed-use portion of the site, compared to the existing four percent on the entire site. The revised project would therefore meet the intent of these policies, and not conflict with the Urban Design Element of the General Plan.

City of Huntington Beach Land Use Element

Goal LU 2 Ensure that development is adequately served by transportation infrastructure, utility infrastructure, and public services.

Policy LU 2.1.1 Plan and construct public infrastructure and service improvements as demand necessitates to support the land uses specified in the Land Use Plan (as defined in the Circulation and Public Utilities and Services Elements of the General Plan).

Policy LU 2.1.2 Require that the type, amount, and location of development be correlated with the provision of adequate supporting infrastructure and services (as defined in the Circulation and Public Utilities and Services Elements of the General Plan).

Policy LU 2.1.3 Limit the type, location, and/or timing of development where there is inadequate public infrastructure and/or services to support land use development.

Policy LU 2.1.5 Permit increases in development capacity consistent with the types and densities of uses depicted on the Land Use Plan (Figure LU-5) and prescribed by Policy 7.1.1, when it can be demonstrated that additional transportation improvements have been implemented or are funded, or demands have been reduced (based on highway level of service and vehicle trips).

Consistency Analysis

Implementation of the revised project would result in a lesser demand for public services and utilities, as identified in Chapter 3 (Resource Areas Not Requiring New Analysis) of this Addendum EIR. Therefore, all utility needs were analyzed adequately in the previous EIR. Infrastructure improvements for water, wastewater, storm drains, on-site roadways, etc. that would be necessary to serve the revised development would be constructed prior to development. The future on-site utilities would connect to existing facilities and some improvements to existing infrastructure may be required. In addition, existing public services would be adequate to serve the revised project. The same traffic mitigation measures that were required for the previous project would also be required for the revised project. Consequently, the revised project and associated increases in development densities would not conflict with the applicable policies.

Goal LU 4 Achieve and maintain high quality architecture, landscape, and public open spaces in the City.

Policy LU 4.1.1 Require adherence to or consideration of the policies prescribed for Design and Development in the Huntington Beach General Plan, as appropriate.

Policy LU 4.1.2 Require that an appropriate landscape plan be submitted and implemented for development projects subject to discretionary review.

Policy LU 4.1.8 Use reclaimed water for irrigation of public and private landscape, as feasible.

Policy LU 4.2.1 Require that all structures be constructed in accordance with the requirements of the City's building and other pertinent codes and regulations; including new, adaptively re-used, and renovated buildings.

Policy LU 4.2.4 Require that all development be designed to provide adequate space for access, parking, supporting functions, open space, and other pertinent elements.

Policy LU 4.2.5 Require that all commercial, industrial, and public development incorporate appropriate design elements to facilitate access and use as required by State and Federal Laws such as the *Americans with Disabilities Act* (ADA).

Consistency Analysis

The revised project would adhere to development standards and design guidelines as established in SP-13. The revised project would serve to create active and commercially viable land uses as well as improve the visual qualities of the present project site by removing the outdated vacant commercial structures and providing substantial additional landscaping. Landscaping would cover approximately 10 percent of the Costco portion and 44 percent of the mixed-use portion of the site, compared to the existing four percent on the entire site. Future development under the revised project would also provide visual continuity with the existing Bella Terra Mall to the east, given that similar visual elements and architectural styles would be required under SP-13.

Any future landscaping plan would require City approval prior to implementation. The City does not utilize or serve directly applied recycled water to any of its customers or for municipal purposes. Therefore, as with the previous project, the revised project would be unable to utilize recycled water.

The revised project would be constructed in accordance with existing laws and regulations, including the City's building code and any applicable state and federal law requirements such as the *Americans with Disabilities Act* (ADA). Adequate access to and from the project site would be provided through entrances along Center Avenue and Edinger Avenue. Parking for Costco would be provided in a surface parking lot fronting Center Avenue, while parking for the mixed-use portion of the site would be provided through a mix of surface and structured parking. Therefore, the revised project would not conflict with the above policies.

Goal LU 7 Achieve a diversity of land uses that sustain the City's economic viability, while maintaining the City's environmental resources and scale and character.

Policy LU 7.1.1 Accommodate existing uses and new development in accordance with the Land Use and Density Schedules.

Policy LU 7.1.2 Require that development be designed to account for the unique characteristics of project sites and objectives for

community character and in accordance with the Development "Overlay" Schedule, as appropriate.

Policy LU 7.1.5 Accommodate the development of a balance of land uses that maintain the City's fiscal viability and integrity of environmental resources.

Policy LU 7.1.6 Accommodate the development of additional jobs-generating land uses that improve the 1992 jobs to housing ratio of 0.82 to 1.0 or greater; to meet objectives of the Regional Comprehensive Plan (Southern California Association of Governments) and Air Quality Management Plan. These should capitalize upon existing industrial strengths and emphasizing the clustering of similar or complementary industries.

Consistency Analysis

As discussed in the previous EIR, the project site is located in an area of the City that is currently undergoing revitalization. The Beach-Edinger Corridors Specific Plan was recently approved and is intended to present a clear and comprehensive vision for growth and change along Beach Boulevard and Edinger Avenue. The project site is not included in the Beach-Edinger Specific Plan because the Bella Terra property is subject to SP-13. However, the site is surrounded by properties located within the Beach-Edinger Specific Plan. The area north of Warner Avenue along Beach Boulevard, and including the Edinger segment, is generally planned for more intensive mixed-use development. In particular, this northern segment is intended to act as a Town Center, or hub, providing a destination and live/work center for the City, with primarily retail and residential development.

The revised project would accommodate jobs-generating land uses through the provision of additional commercial uses which would complement the existing commercial uses surrounding the project site, particularly with the existing Bella Terra Mall. Therefore, the revised project would not conflict with these policies.

Goal LU 8 Achieve a pattern of land uses that preserves, enhances, and establishes a distinct identity for City's neighborhoods, corridors, and centers.

Policy LU 8.1.1 Accommodate land use development in accordance with the patterns and distribution of use and density depicted on the Land Use Plan Map, in accordance with the principles discussed below:

a. N/A
b. Vary uses and densities along the City's extended commercial corridors, such as Beach Boulevard.
c. Increase diversification of community and local commercial nodes to serve adjacent residential neighborhoods.
d. N/A
e. Intermix uses and densities in large-scale development projects

f. Site development to capitalize upon potential long-term transit improvements.
g. Establish linkages among community areas, which may include pedestrian and vehicular paths, landscape, signage, other streetscape elements, open space, transitions in form, scale, and density of development, and other elements.

Consistency Analysis

The revised project is located along the Edinger Avenue commercial corridor. Implementation of the revised project would facilitate future development of a mixed-use residential and commercial development within the corridor. Golden West College is located west of the revised project site while the nearest residential uses are located at Old World Village, less than 0.25 mile north of the project site. The revised project's retail uses, including the proposed Costco, would not only serve residents located on-site but would also serve students, faculty and staff from the college, nearby residents and the community. In addition, the revised project would be located less than ¼-mile from the Golden West Transportation Center, which provides transit access throughout northern Orange County. As a result, future residents and patrons would have access to alternative means of transportation. For these reasons, the revised project would not conflict with this policy.

Goal LU 9 Achieve the development of a range of housing units that provides for the diverse economic, physical, and social needs of existing and future residents of Huntington Beach.

Policy LU 9.1.1 Accommodate the development of single- and multifamily residential units in areas designated by the Land Use Plan Map, as stipulated by the Land Use and Density Schedules.

Policy LU 9.1.3 Require that multifamily residential projects be designed to convey a high level of quality and distinctive neighborhood character as discussed below;

a. Design building elevations treatment to convey the visual character of individual units rather than singular building mass and volumes.
b. Locate the elevation of the first occupiable floor at or in proximity to the predominant grade elevation, visually screening subterranean parking facilities from the street frontage.
c. Include separate and well-defined entries to convey the visual character of individual identity for each residential unit, which may be accessed from exterior facades, interior courtyards, and/or common areas.
d. Site and design parking areas and facilities that are integrated with but do not dominate the architectural character of the structure.

e. Include an adequate landscape setback along the street frontage that is integrated with abutting sidewalks and provides continuity throughout the neighborhood.

Policy LU 9.1.4 Require that recreational and open space amenities be incorporated in new multifamily developments and that they be accessible to and of sufficient size to be usable by all residents.

Consistency Analysis

The revised project would include development of a big-box retail store (Costco) in place of the mixed-use development that was previously analyzed on the northern portion of the project site. In the southern portion of the site along Edinger Avenue, mixed-uses would still be developed.

As discussed in the previous EIR, single-family residential uses represent approximately 61.6 percent of the City's overall housing stock, while two- to four-unit multifamily structures account for approximately 12.7 percent. The provision of multifamily units as part of the mixed-use development would complement the dominance of single-family housing in the City, and would benefit the proposed Costco and the existing retail, office, education, and transportation uses in the surrounding area. The revised project would be designed in such a way as to be consistent with the styles of the existing Bella Terra shopping center. As required by the architectural guidelines of SP-13, the proposed Costco building would include architectural details to soften the large façade of the structure. Along with varying heights that would provide variety to the roofline, the revised project would include, but not be limited to, textured panels in various complementary colors, terra cotta roof tiles, stone veneers, metal accents, and canopies.

Future mixed- use development under the revised project would also be designed in a manner that would provide visual continuity with the existing Bella Terra Mall to the east. The proposed mixed-use development fits with the visual land use theme envisioned for the area of a high-quality urban village consisting of high-density residential and retail commercial uses within a community of pedestrian-oriented buildings separated by courtyards. More detailed analysis of the visual characteristics of the revised project is discussed under Section 4.1 (Aesthetics).

A parking structure would be integrated within the overall project site and would be screened from view by residential units on three sides. Development standards and design guidelines in SP-13 would ensure that future development includes proper site planning, unique architecture, high-quality building materials, and extensive indoor and outdoor amenities. Substantial landscaping would be provided on the project site. The revised project would ensure that form, height, and treatment of buildings would convey a high level of quality. Therefore, upon approval of the revised project, future development at the revised project site would not conflict with this policy.

Goal LU 10 Achieve the development of a range of commercial uses.

Policy LU 10.1.1 Accommodate the development of neighborhood, community, regional, office, and visitor-serving commercial

uses in areas designated on the Land Use Plan Map in accordance with Policy 7.1.1.

Policy LU 10.1.3 Require the incorporation of facilities to promote the use of public transit, such as bus turnouts and drop-offs where appropriate.

Policy LU 10.1.4 Require that commercial buildings and sites be designed to achieve a high level of architectural and site layout quality.

Policy LU 10.1.5 Require that buildings, parking, and vehicular access be sited and designed to prevent adverse impacts on adjacent residential neighborhoods.

Policy LU 10.1.15 Require that regional commercial developments be designed to convey the visual sense of an integrated center by consideration of the following principles:

a. Use of multiple building volumes and masses and highly articulated facades to reduce the visual sense of large-scale "boxes"
b. Use of roofline or height variations to visually differentiate the building massing and incorporation of recesses and setbacks on any elevation above the second floor above grade
c. Siting of a portion of the buildings in proximity to their primary street frontage to convey a visual relationship to the street and sidewalks
d. Design of the exterior periphery of the structures to contain shops, restaurants, display windows, and other elements that provide visual interest to parking areas and the street elevation
e. Inclusion of a "public square" as a gathering place of public activity in multi-tenant regional centers
f. Clear identification of building entrances
g. Use of landscape that provides a three-dimensional character
h. Encourage the provision of public art
i. Inclusion of consistent and well-designed signage integrated with the building's architectural character, including pedestrian-oriented signage
j. Design of parking structures to be visually integrated with the commercial buildings

Consistency Analysis

Implementation of the revised project would facilitate future mixed-use residential and commercial uses. The smaller scale and big-box retail uses associated with the project would not only serve residents located on site, but would also serve students, faculty and staff from Golden West College, nearby residents, and the larger community.

In addition, the revised project would be located less than 0.25 mile from the Golden West Transportation Center, which provides transit access throughout northern Orange County. As a result, future residents and patrons would have access to alternative means of transportation. The mixed-use portion of the revised project, though smaller than the previous project, would still be designed to encourage pedestrian activity and reduce dependence on automobiles through the implementation of mixed-uses and through the incorporation of bus turnouts, bicycle facilities, and integrated pathways toward existing commercial and transit uses, where feasible.

The nearest residential uses are located at the Old World Village, less than 0.25 mile north of the project site. However, because the existing residential uses are not directly adjacent to the site, future development siting would not affect these uses. A parking structure would be integrated within the overall project site and would be screened from view on three sides by residential uses. The revised project would adhere to development standards and design guidelines as established in SP-13 and would ensure that form, height, and treatment of future development would convey a high level of quality. Therefore, upon approval of the revised project, future development at the project site would not conflict with these policies.

Goal LU 15 Achieve new development that enhances the City's quality of development and sense of place, goals for community character, and preserves significant historical resources.

Policy LU 15.7.1 Allow the development of residential uses in conjunction with the underlying commercial designation. The Mixed Use overlay permits the development of horizontally or vertically integrated mixed-use projects. The design and density for a mixed-use project shall be as shown on the Land Use Map (see Table LU-2B for more detail). If a mixed-use project is not proposed, then the density of the underlying commercial designation shall be utilized.

Consistency Analysis

Implementation of the revised project would result in a GPA and ZTA that would result in the realignment of the dividing line between Areas A and B of SP-13 and would transfer approximately 5.45 acres from Area B to Area A. The Area B mixed-use overlay and associated development and design standards, permitted uses and densities would remain the same as previously analyzed but would be reduced from approximately 15.85 acres to approximately 10.4 acres with a maximum of 468 residential units and 30,000 sf of retail. Implementation of the revised project would permit big-box and fuel station uses and establish associated design and development standards for such uses within Area A that were not previously allowed. Implementation of the revised project would not change the existing design or density/FAR regulations from what are currently permitted.

In concert with the existing Bella Terra Mall and additional redevelopment projects proposed nearby, implementation of the revised project would facilitate quality mixed-use development that would enhance the character of the area by providing a unified theme of development. Therefore, the revised project would not conflict with this policy.

Summary

The revised project would consist of the same uses in the southern portion of the site that were analyzed previously and would include development of a Costco center rather than mixed-uses in the northern portion. Though the proposed Costco center would represent a change in use from what was previously approved for the project site, the big-box commercial use would not represent a change of use compared to existing conditions.

The proposed re-use of the site would not in itself result in environmental impacts related to land use and planning. Given the relationship with the revitalization efforts currently underway along the Edinger Avenue Commercial Corridor, including the existing Bella Terra Mall and The Amstar/Red Oak (formerly The Ripcurl) project proposed to the west of the project site, and the high density land uses that are envisioned within this area in the future (as evidenced by the Beach-Edinger Corridors Specific Plan), the revised project would not conflict with existing City policies or regulations that were adopted for the purpose of mitigating an environmental impact. Instead, the revised project would provide the City with redevelopment in an area that could support high-density uses without contributing to adverse effects to the City's existing population base. Consequently, this is considered a ***less-than-significant*** impact.

4.4.4 Cumulative Impacts

Development of cumulative projects is anticipated to generally conform to the requirements of city regulations and would be subject to review by the Planning and Building Department. Cumulative land use impacts have the potential to occur where a number of projects have the potential to change the overall land use of an area or negatively affect adjacent existing land uses. Environmental review required under CEQA for pending development projects and general plan amendments would allow decision makers to identify and evaluate the impacts associated with these proposed cumulative changes based on the City's Land Use categories and policies. Should such analysis identify significant land use impacts, mitigation measures would be required to reduce those impacts to a less-than-significant level. Absent effective and feasible mitigation, the City may determine that the benefits derived from the proposed Land Use changes are sufficient to justify adoption of a Statement of Overriding Considerations, permitting the revisions and their associated projects to proceed. Cumulative projects primarily result in development or redevelopment of sites in order to enhance existing land use patterns within areas of the City, and are therefore generally anticipated to be compatible with adjacent uses. Therefore, cumulative land use impacts would be less than significant.

4.4.5 Comparison of Impact Conclusions

A comparison of the revised project with the previous project is detailed individually for each potential impact in the discussions of land use impacts provided above. The primary differences between the previous and revised project are (1) the allowance of a big-box retail store (including gas station) in place of a portion of the previously considered mixed-uses and (2) revision to the previously approved General Plan designation and Zoning with the proposed GPA and ZTA. However, per the discussions above,

implementation of the revised project would result in the same less-than-significant impacts associated with land use compared to the previous project. No new impacts or increased severity of previously identified impacts would result. No new mitigation is required.

Implementation of the revised project would result in the same less-than-significant land use impacts compared to the previous project. No new impacts or increased severity of previously identified impacts would result. No new mitigation is required.

The comparison of anticipated environmental impacts of the revised project with those identified for the previous project supports the required CEQA findings below. Specifically, none of the conditions set forth in Section 15162 of the 2010 CEQA Guidelines that would require preparation of a supplemental EIR has been met:

- The revised project would not result in new significant impacts to land use, nor is there a substantial increase in the severity of impacts from that identified in the previous EIR.
- There is no information in the record or otherwise available that indicates there are substantial changes in circumstances pertaining to land use that would require major revisions to the previous EIR.
- There is no substantial new information that would result in a new significant impact to land use requiring major revisions of the previous EIR.
- There are no alternatives to the previous project or additional mitigation measures that would substantially reduce one of more significant impacts pertaining to land use identified in and considered in the previous EIR.

4.4.6 References

DJM Capital Partners, Inc. 2010. *Project Description* for The Village at Bella Terra, July 6.

Huntington Beach, City of. 2010. *Environmental Assessment Form* for Bella Terra Phase II Associates, LLC, March 15.

———.1996. *Huntington Beach General Plan*, May 13.

———. 2008. *Bella Terra Specific Plan No. 13*, November 17.

4.5 NOISE

This section analyzes impacts of the revised project with respect to potential increases in noise and groundborne vibration during construction and operational activities of the revised project. Implementation of the revised project would result in an increase in noise-generating commercial activities, including an increase in the delivery of goods as well as operation of a tire center and fuel station, over what was evaluated in the previous EIR. Implementation of the revised project would also result in a change in traffic patterns along adjacent roadways compared to that evaluated in the previous EIR. As the project site is not located within an airport land use plan or affected area near an airstrip, the Initial Study for the previous project determined that analysis is not required regarding impacts due to proximity to or association with an airport land use plan or airstrip. Baseline conditions with respect to ambient noise and vibration levels in the vicinity of the project site remain substantially the same as when the previous EIR was certified. Additional data were obtained from the *Noise Impact Analysis, Huntington Beach Costco, Huntington Beach, California*, prepared by Giroux & Associates for the proposed project. Full bibliographic entries for all reference materials are provided in Section 4.5.5 (References) at the end of this section.

4.5.1 Environmental Setting

Fundamentals of Sound and Environmental Noise

The environmental setting of the project site and surrounding area has not changed with respect to ambient noise and vibration levels as described in Section 4.9.1 of the previous EIR (pages 4.9-1 through 4.9-9).

4.5.2 Regulatory Framework

The regulatory framework as described in Section 4.9.2 of the previous EIR (pages 4.9-9 through 4.9-15) has not changed since certification of the previous EIR.

4.5.3 Project Impacts and Mitigation

Analytic Method

The analysis in this section focuses on the nature and magnitude of the change in the noise environment associated with implementation of the revised project. The revised project includes a 154,113-square-foot (sf) Costco store with an associated tire center and a sixteen-pump gas station, as well as a mixed-use development consisting of 468 residential units and 30,000 sf of retail uses. The previous EIR evaluated the potential effects of a higher-intensity mixed-use project. With respect to noise-related issues, the primary difference between the previous and revised project is the construction and operation of a Costco in place of a greater mixed-use project.

As with the previous EIR, the nearest sensitive receptors to the project site are the residential uses at Old World Village, located approximately 285 feet north of the project site, and the Seawind Village Apartment located approximately 550 feet north of the project site. Golden West College is located approximately 945 feet west of the project site. Multi-family residential uses are also located approximately 760 feet south of the project site. Additionally, the RedOak/Amstar project (formerly The Ripcurl project), a mixed-use development that is proposed to be occupied during operation of the revised project, is located to the west and within 50 feet of the proposed project site. Therefore, it is likely that operation activities associated with the revised project would occur while the residential uses of the RedOak/Amstar project are occupied.

Construction activities would be similar for the revised project as was evaluated in the previous EIR, although the revised project would involve increased demolition and pile-driving activities than were proposed and evaluated in the previous EIR.

Noise modeling procedures involved the calculation and comparison of the previous EIR's roadway noise levels and the revised project's future vehicular noise levels along individual roadway segments in the site vicinity. This task was accomplished using the Federal Highway Administration (FHWA) Highway Noise Prediction Model (FHWA RD 77 108). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. Traffic volumes utilized as data inputs in the noise prediction model were provided by the *Bella Terra Expansion Supplemental Traffic Analysis* prepared by Austin-Foust Associates for the revised project. The analysis considers the change in future cumulative traffic noise levels, in recognition of changes in traffic volumes and resultant noise levels from those analyzed in the previous EIR, which provide an appropriate benchmark against which project noise can be assessed.

Development of the revised project, in particular the Costco, would include additional noise sources that were not contemplated under the previous EIR. These noise sources include the tire center and gas station that would be located along the eastern perimeter of the Costco building. Additionally, operation of the revised project would potentially expose residences of the Old World Village and the RedOak/Amstar project to increased noise and groundborne vibration levels due to increased early morning deliveries. Development of the revised project could also expose future Bella Terra Village residential uses to increased HVAC and other rooftop machinery noise than was previously identified.

The *Noise Impact Analysis, Huntington Beach Costco, Huntington Beach, California*, prepared by Giroux & Associates for the revised project, obtained representative noise generation data from Costco tire centers, loading docks, service stations, and HVAC units, then placed the generation data within the context of the revised site plan, and calculated off-site noise exposure at nearby receptors after accounting for distance between receptors and structural interference provided by existing buildings. It should be noted that, due to the on-site orientation of the proposed Costco building, anticipated future noise levels associated with operation of tire center, gas station and HVAC were compared to applicable City of Huntington Beach noise standards at the façade of the closest proposed Village at Bella Terra residential building in the southern portion of the site. In addition, the anticipated noise levels associated with loading dock operations were evaluated at the RedOak/Amstar project as well as the closest apartment in Old World Village abutting Center Avenue with a line of sight into the loading dock area.

Thresholds of Significance

The following thresholds of significance are based on Appendix G to the 2010 CEQA Guidelines. For purposes of this Addendum EIR, implementation of the revised project may have a significant adverse impact if it would do any of the following:

- Exposure of persons to or generation of noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels
- A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project
- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project
- Located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport and expose people residing or working in the project area to excessive noise levels
- Located within the vicinity of a private airstrip and expose people residing or working in the project area to excessive noise levels

Effects Not Found to Be Significant

Threshold	For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?

The project site is not located within 2 miles of a public airport, public use airport, or private airstrip. Similar to the previous EIR, no impact would occur with implementation of the revised project and no further analysis is required.

Revised Impacts and Mitigation

Threshold	Would the project expose people to or generate noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies?

Impact 4.5-1 **Construction activities associated with the revised project would not exceed the standards established in the Huntington Beach Municipal Code, similar to the previous project. Operation of the revised project would not result in noise levels in excess of standards established by the City, similar to the previous project. Implementation of mitigation measures MM4.5-1 and MM4.5-2 would ensure this impact remains *less than significant*, similar to the previous EIR.**

Construction

The revised project would include development of a Costco in place of the mixed-use development that was previously analyzed on the northern portion of the project site. The revised project would result in the demolition of the 90,885 sf Mervyn's building, which was not originally analyzed in the previous EIR. In its place, surface parking for a Costco and a gas station would be constructed. Mixed-uses would still be developed in the southern portion of the project site, although to a lesser extent than the previous project, with a maximum of 468 residential units and 30,000 sf of commercial retail.

Construction under the revised project would involve the demolition of 299,395 sf of existing commercial uses at the site (90,695 sf more than analyzed in the previous EIR), along with excavation, pile driving for structural foundations, and construction of the revised project, all of which would involve the use of heavy equipment. The types of heavy equipment used on-site under the revised project would be similar to those analyzed in the previous EIR. Each stage of construction would involve a particular mix of operating equipment, and noise levels would vary based on the amount and types of equipment in operation and the location of the activity. Construction of the Costco building would occur in one continuous phase, with four discrete construction phases, lasting a total of twelve months, with demolition activities of the Mervyn's building anticipated to begin in early 2011 and last for approximately 30 days; excavation and utility installation is anticipated to last approximately one month; pile driving activities for structural foundations would follow for approximately one month; and building construction including architectural coating and site paving is anticipated to last for approximately 6 months with occupancy anticipated in late 2011. Construction of the mixed-use component of the revised project would occur in a similar manner as was evaluated in the previous EIR and is anticipated for occupancy in 2014.

Nearby sensitive receptors that would be subjected to potential elevated noise levels associated with construction of the revised project would be substantially similar to those analyzed in the previous EIR. These would include the residential uses located at the Old World Village, approximately 285 feet north of the project site, and the Seawind Village Apartments located approximately 550 feet north of the project site, separated by Center Avenue and the Old World Village Shopping Center. The Perth Christian School is located approximately 520 feet to the southeast across Edinger Avenue and the

Montessori School of Huntington Beach is located approximately 1,400 feet to the southeast, also across from Edinger Avenue. Additionally, Golden West College is located approximately 945 feet west of the project site. As was evaluated in the previous EIR, these educational and residential sensitive uses could be affected by construction noise of the revised project. The construction phase that would generate the greatest noise levels is the pile-driving phase, which is anticipated to last for approximately 35 days during construction of the Costco building (pile driving would still occur for an additional seven months with the future development of the mixed-use on-site, as described in the previous EIR). Noise levels during the pile driving activities at the residential portion of the Old World Village located approximately 285 feet north of the project site could reach up to 91 dBA based upon an attenuation rate of 6 dBA per each doubling of distance, the same as was identified in the previous EIR.

However, similar to what was stated in the previous EIR, under Section 8.40.090(d) (Special Provisions) of Chapter 8.40 of the City's Municipal Code, noise sources associated with construction are exempt from the requirements of the Municipal Code, provided that the Applicant has acquired the proper permit(s) from the City and construction activities do not occur between the hours of 8:00 P.M. and 7:00 A.M. on weekdays, including Saturday, or at any time on Sunday or a federal holiday.

Additionally, the same mitigation measures identified in the previous EIR (previously MM4.9-1 and MM4.9-2) would apply to the construction activities associated with development of the revised project.

MM4.5-1 *The Applicant shall require by contract specifications that the following construction best management practices (BMPs) be implemented by contractors to reduce construction noise levels:*

- *Notification shall be mailed to owners and occupants of all developed land uses immediately bordering or directly across the street from the project site area providing a schedule for major construction activities that will occur through the duration of the construction period. In addition, the notification will include the identification and contact number for a community liaison and designated construction manager that would be available on site to monitor construction activities. The construction manager will be located at the on-site construction office during construction hours for the duration of all construction activities. Contract information for the community liaison and construction manager will be located at the construction office, City Hall, and the police department.*
- *Ensure that construction equipment is properly muffled according to industry standards*
- *Utilize the best available technology to reduce noise levels from pile driving activities, including but not limited to the use of noise blankets or temporary sound barriers*
- *Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible*
- *Schedule pile-driving activities between the hours of 8:00 A.M. and 4:00 P.M. on Mondays through Fridays only.*

MM4.5-2 *The Applicant shall require by contract specifications that construction staging areas, along with the operation of earthmoving equipment within the project site, are located as far away from vibration- and noise-sensitive sites as possible. Contract specifications shall be included in the proposed project construction documents, which shall be reviewed and approved by the City.*

Therefore, with compliance to the City of Huntington Beach Municipal Code and implementation of mitigation measures MM4.5-1 and MM4.5-2 construction activities resulting from implementation of the revised project would remain ***less than significant***.

Operation

Two new sources of noise would be developed with implementation of the revised project that were not evaluated in the previous EIR. Operation of Costco would include a tire center and a 16 pump self-serve gas station for Costco customer use. The potential effects of these noise sources on existing and future residential on- and off-site uses are examined below.

Noise generated by a tire center consists mainly of the operation of air wrenches to remove or mount tires, popping noise from tire bead breaking on the rims, and occasional thumping of mallets or banging of metal on metal. Because of the intermittent nature of these activities, they would likely be considered "impact noise" in the Municipal Code. For purposes of analysis, tire center activities were assumed to be "daytime" activities (7 a.m. to 10 p.m.) with a 5 dBA penalty because of their variable characteristics as specified by Section 8.40.050(b). It should also be noted, however, that peak tire center noise occurs in short bursts with intervening periods of quiet. Such intermittent peaks are reached for only brief cumulative periods in any one hour. Measurements at operating tire centers suggest that the cumulative duration of greatest noise generation is approximately 5 minutes per hour (represented in this Addendum as L_{08}). [2] Under Section 8.40.050(b) intermittent impact noise for residential properties (Noise Zone 1) is allowable if it does not exceed the residential standard of 55 dBA by 5 dBA (10 dBA increase allowed minus 5 dBA penalty) for a duration of 5 minutes. The maximum allowable noise level would be 70 dBA L_{max}.[3]

Another consideration for the proposed tire center is that air wrenches and other equipment would be partially enclosed with much of the noise projecting outward through the open roll-up doors. The nearest residential building in the southern portion of the site would be located approximately 175 feet from the tire center and would be situated at a 90-degree angle to the primary noise propagation path. Some proposed residential units on-site would have a partial view into the tire center, but at a distance of approximately 225 feet. The measured noise level (5-minute peak per hour) for a 4-bay tire center in Tustin, California was 60 dBA L_{08} at 50 feet from the tire center doors during multiple tire changes. The measured peak noise level during air wrench use was 72 dBA L_{max}. In order to determine noise levels at the nearest residential building noise levels at the Tustin facility were also measured at 50 feet and replicating the 90-degree angle that the residential unit would experience. At the identical 50-foot distance at 90 degrees off the propagation axis, the measurement was 55 dBA L_{08}. The receiver orientation parallel to the façade of the tire center reduced noise levels by 5 dB. The measured maximum along the parallel axis of 66 dBA L_{max} was 6 dBA quieter than along the perpendicular axis.

[2] To describe the time varying character of environmental noise, the statistical noise descriptors L_{01}, L_{10}, L_{50}, and L90 are commonly used. They are the A-weighted noise levels equaled or exceeded during 1%, 10%, 50%, and 90% of a stated time period. The L_{08} noise descriptor represents the A-weighted noise level equaled or exceed for 8% (or 5 minutes) of an hour.

[3] L_{max} is the maximum instantaneous noise level experienced during a given period of time.

Tire center noise associated with Costco was calculated at two receptor locations due to different environmental conditions and potential variability in noise levels beyond just attenuation over distance. Location 1 is the closest possible residential development at 175 feet from the mid-point of the tire center. Location 2 would be 225 feet away, but it would have a partial line of sight into the open bays. The calculated noise levels relative to the L_{08} and L_{max} standards show that the closest residential unit from the tire center would be exposed to an L_{08} of 44 dBA, and an L_{max} of 55 dBA due to distance and the 90-degree angle to the tire center doors. Location 2, with a partial line of site would be exposed to L_{08} of 47 dBA, and an L_{max} of 59 dBA. Therefore, operation of the tire center would not expose future residential uses associated with the revised project to noise levels above the allowable limits established by Section 8.40.050 of the City's Noise Ordinance and this impact would remain ***less than significant***.

In addition, under the revised project, single-event noise levels could affect adjacent sensitive receptors. The single event peak noise level from fuel delivery by tanker trucks has been measured at several locations to be 80 dBA L_{max} at 50 feet from the truck. The storage tanks will be approximately 135 feet from the nearest on-site residence and over 235 feet from the off-site residential uses of the Old World Village. The spreading loss from the tanks to the closest bedroom windows would be 9 dBA, which would result in a peak noise from fuel delivery activities of 71 dBA L_{max}. This would potentially exceed the applicable noise ordinance standard of 65 dBA L_{max}. However, single event noise from possible nocturnal fuel deliveries would typically be similar to peak noise events from existing sources (car horns, motorcycles, sirens, aircraft, etc.). It should be noted, however, that existing nocturnal noise levels already exceed 71 dB (L_{max}) in several hours of the night even in the absence of any current commercial activity. As shown in Table 4.5-1 (Measured L_{max} Noise Levels [Evening Hours]), measured L_{max} levels at the site of the proposed tower farthest from Center Avenue were as follows (dBA):

Table 4.5-1 Measured L_{max} Noise Levels [Evening Hours]

Time	10:00–11:00 P.M.	11:00 P.M.–12:00 A.M.	12:00–1:00 A.M.	1:00–2:00 A.M.	2:00–3:00 A.M.	3:00–4:00 A.M.	4:00–5:00 A.M.	5:00–6:00 A.M.	6:00–7:00 A.M.
Day 1	70	71	70	67	69	60	66	71	64
Day 2	69	70	65	70	68	65	74	71	69

SOURCE: Giroux and Associates 2010

In accordance with Section 8.40.060 of the City's Noise Ordinance, when baseline levels already exceed the noise ordinance threshold, the compliance standard is adjusted upward to equal the baseline. As such, night time fuel deliveries would not result in single event noise levels that would exceed the standards established in the City's Noise Ordinance and impacts would be considered ***less than significant***.

Similar to the previous project large-scale HVAC systems would be installed for the Costco building (as well as the mixed-uses in the southern portion of the site), which could increase perceived operational noise levels over what was previously analyzed. The proposed Costco's roof would be equipped with sixteen major air conditioners, three small units for office areas, a twenty-four-fan refrigeration condensing unit rack (RTU), and several small vents from ovens or cook tops. The revised conceptual mixed-use layout in the southern portion of the site would place a residence at 60 feet from the southeast corner of the Costco warehouse with an almost direct line-of-sight from the closest 4th floor residence.

These HVAC units would be mounted within HVAC wells on the rooftops of the proposed buildings and would be screened from view by the wells and other building features, and therefore noise levels would not impact sensitive receptors on- or off-site of the project site. Additionally, noise from mechanical equipment associated with operation of the project would be required to comply with the State Building Code requirements pertaining to noise attenuation, and with City regulations requiring adequate buffering of such equipment.

For the proposed Costco, an average sound power level of 82 dB was assumed for fourteen 25-ton RTUs. The five smaller units were assigned a 77 dB rating with a 75 dB rating for roof-top fans. The refrigeration condensing rack will be the loudest equipment, but it would be located 450 feet from the closest residence. As such, the nearest residential unit located on the fourth floor, with a direct line-of-sight, would experience an exterior composite mechanical equipment noise of 50 dBA. This meets the daytime standard of 55 dBA (L_{50}). This presumes that every piece of equipment would operate under full power for at least 30 minutes per hour. Even with worst-case assumptions of a direct line-of-sight of the roof-tops and a residence as close as 60 feet from the corner of the proposed Costco building, mechanical equipment noise would be within allowable levels. Therefore, impacts would remain ***less than significant***, similar to the previous EIR.

The Union Pacific Railroad right-of-way is located approximately 30 feet west of the project site. However, the revised project would result in fewer residential uses and the employees and patrons of Costco would not be considered noise sensitive uses. Therefore, the revised project would not result in noise sensitive uses being exposed to noise levels from the Union Pacific Railroad (UPRR) right-of-way due to train pass-by beyond what was previously analyzed.

Operation of the revised project would also involve an increase in the delivery of goods and food stuffs for the Costco commercial operations. Two major contributors to operational noise associated with delivery operations would be the noise of the diesel engines of the semi-trailer trucks and the backup beeper alarm that sounds when a truck is put in reverse, as is required and regulated by Cal-OSHA. Backup beepers are required by Cal-OSHA to be at least 5 dBA above ambient noise levels. These devices are highly directional in nature, and when in reverse the trucks and the beeper alarm would be directed towards the loading area and adjacent commercial structures. Backup beepers are, of course, intended to warn persons who are behind the vehicle when it is backing up.

Loading dock noise measurements involving diesel truck delivery of retail goods have generally averaged 60 dBA L_{eq} during a busy hour. This represents brief periods of more intense noise generation and extended periods of minor banging or rumbling during actual unloading from the use of forklifts and the sound of pallets and bulky items being moved from trailers to the warehouse. Most observers report that loading docks are typically inaudible beyond 100 feet from the loading dock except during truck movements. Sealed rubber gaskets would be provided around the loading dock doors where the trucks would back up into the truck dock to reduce loading and unloading noise. The seals are also intended to eliminate noise from forklifts used to unload the trucks and eliminate noise emanating from operations inside the building while a truck is positioned at the dock.

The most audible activity is from the delivery truck backing the full trailer into the dock and unhooking the trailer. A similar type of noise results when the trailer is again hooked up and pulled away from the dock. The measured reference noise level during truck maneuvering at a loading dock is 75 dBA at 50 feet from the source with peaks of 80 dBA L_{max}. These noise levels are generated by the trucks engine and the movement of the large trailers. As required by City of Huntington Beach General Plan Noise Element Policy N 1.4.2, a screening wall will be developed along the western boundary of the loading dock area that will be 7 feet in height at the northern end of the loading dock. This wall will screen the delivery truck cab and engine components from view and serve to reduce truck noise by approximately 10 dBA, resulting in a noise level of approximately 65 dBA at a distance of 50 feet.

As shown in Figure 3-4 (Revised Conceptual Master Plan), the loading docks associated with the revised project would be located adjacent to the northwestern surface parking lot, approximately 100 feet to the east of the project site property line. This location, the sealed loading dock doors and the Costco building would ensure that noise from the delivery of goods to the Costco would be screened from on-site sensitive receptors. It should be noted that the RedOak/Amstar project residential uses would be located approximately 185 feet from the loading docks, as the RedOak/Amstar residential structures would be designed such that the closest residential unit would be no closer than 35 feet from the rail line right-of-way that separates the two projects.[4] Additionally, the residential uses would be required to be designed to meet or exceed a 45 L_{dn} interior noise standard, consistent with the 1996 Noise Element and with the California Building Code. As described above, the western boundary of the loading dock would have a 7-foot-high screening wall that would reduce noise levels from delivery trucks by 10 dBA, and shield residences of the RedOak/Amstar project from loading dock noises. With the provision of the screening wall, intermittent impact noise levels at the RedOak/Amstar project are anticipated to be approximately 53 dBA L_{08}. As previously stated, under Section 8.40.050(b) intermittent impact noise for residential properties (Noise Zone 1) is allowable if it does not exceed the residential standard of 55 dBA by 5 dBA (10 dBA increase allowed minus 5 dBA penalty) for a duration of 5 minutes. As the short term intermittent noise levels at the RedOak/Amstar are anticipated to be 53 dBA L_{08}, noise levels would not exceed the standards established by the City's Noise Ordinance, and impacts would be less than significant.

The residential uses of the Old World Village located approximately 285 feet north would have a direct line of site to the loading dock area. However, due to the distance of the apartments, noise levels from loading dock activities would not exceed the City's 55 dBA exterior noise limit for residential uses, or the adjusted single event standard, and impacts would remain ***less than significant*** from loading dock activity, similar to the previous EIR.

In addition, noise generated by authorized City refuse collectors operating during regularly scheduled removal hours would be considered exempt from City noise standards.

The same mitigation measure identified in the previous EIR (previously MM4.9-3) has been identified in order to ensure that operation noise levels do not exceed the City of Huntington Beach exterior and interior noise standards for the residential component of the revised project. Development of the

[4] City of Huntington Beach, 2008 The Ripcurl Project EIR, pg. 4.9-20. July

residential portion of the revised project would still be required to implement mitigation measure MM4.5-3, which would require that the project applicant conduct an acoustical analysis and incorporate design measures and features that would ensure that noise levels from operation of Costco, such as loading dock activity do not exceed the noise standards established by the City of Huntington Beach Municipal Code. Therefore, typical daily operation of the revised project would not be in excess of the City's Municipal Code. This impact would remain ***less than significant***, similar to the previous EIR.

MM4.5-3 *Prior to issuance of building permits, the Applicant shall submit an acoustical study, prepared by a certified acoustical engineer, to ensure that exterior (e.g., patios and balconies) and interior noise levels would not exceed the standards set forth in the City of Huntington Beach Municipal Code Sections 8.40.050 through 8.40.070. Final project design shall incorporate special design measures in the construction of the residential units, if necessary.*

Threshold	Would the project result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Impact 4.5-2 **Construction and operation activities associated with the revised project would not generate or expose persons off site to excessive additional groundborne vibration. This impact would remain *less than significant*, similar to the previous EIR.**

Construction

Under the revised project, construction of the Costco building and the additional pile driving activities associated with its construction would not result in vibration levels greater than those analyzed in the previous EIR, as no vibration generating activities would be located closer to sensitive receptors than was previously analyzed. Vibration levels could reach approximately 98 VdB within 50 feet of the project site. Construction related vibration levels would attenuate at a rate of approximately 6 VdB per doubling of distance. While not anticipated to be occupied during the revised project's construction activities, proposed residential development at the RedOak/Amstar site would be located approximately 185 feet west of pile driving activities associated with the revised project. Therefore, vibration levels at the nearest residential development associated with the RedOak/Amstar would be 84 VdB if occupied during the revised project pile driving phase. Vibration levels at the residential uses at the Old World Village located approximately 285 feet north of the project site (the closest sensitive receptor) are anticipated to be 81 VdB. Therefore, sensitive receptors would not experience vibration levels during construction of the proposed project that would exceed the Federal Transit Authority's (FTA) vibration impact threshold of 85 VdB for human annoyance. It should be noted that, although the length of time during which pile-driving would take place would increase under the revised project, the additional pile-driving activities associated with Costco would still not exceed FTA's vibration impact threshold. Therefore, this impact would remain ***less than significant***, similar to the previous EIR.

Operation

According to the FTA, it is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Where discontinuities exist in the pavement, heavy

truck passages can be the primary source of localized, intermittent vibration peaks. These peaks typically last no more than a few seconds and often for only a fraction of a second. Groundborne vibration resulting from operation of the revised project would primarily be generated by trucks making daily deliveries to Costco. The loading docks associated with Costco would be located adjacent to the surface parking lot and the UPRR right-of-way along the northwestern portion of the project site, and over 50 feet from the nearest vibration sensitive receptor (future occupants of The RedOak/Amstar project). During operation of the revised project, background operational vibration levels would be expected to average around 50 VdB, as stated in the previous EIR. This is substantially less than the FTA's vibration impact threshold of 85 VdB for human annoyance. As loading dock activities would not result in sustained vibration and background vibration levels would be below 85 VdB, potential vibration impacts associated with operation of the revised project would remain ***less than significant***, similar to the previous EIR.

Threshold	Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Impact 4.5-3 **The revised Costco project would result in a change in PM peak hour local traffic patterns, but would not cause a substantial permanent increase in ambient noise levels. This impact would remain *less than significant*, similar to the previous EIR.**

It has been determined scientifically that a noise level increase of 3 dBA L_{dn} is not readily perceptible to most people. Thus, for the purpose of this analysis, a permanent increase of 3 dBA L_{dn} over ambient noise levels without the project is considered to be substantial. In order to determine if the change in traffic volume from the previous EIR to the revised project would result in an increase in roadway noise levels, a comparison of the roadway noise levels from the previous EIR to the roadway noise levels for the revised project was prepared. As described in Section 4.6 (Transportation/Traffic), the revised project would result in fewer daily trips than was previously analyzed; however, the revised project would result in a shift in trip distribution which would potentially cause an increase in roadway noise levels than was previously analyzed. As shown in Table 4.5-2 (Costco Future Roadway Noise Levels Off Site), the previous project roadway noise levels were compared to future revised roadway noise projections in order to determine whether the change in traffic volumes associated with the revised project would result in an increase in noise levels above the 3.0 dBA threshold identified in the previous EIR.

Table 4.5-2 Costco Future Roadway Noise Levels Off Site

			Noise Levels in dBA L_{dn}				
Roadway	*Segment*	*Existing Land Use*	*Existing*	*Year 2030 with Previous Project*	*Year 2030 with Revised Project*	*Revised Project-Related Increase*	*Significance*
Goldenwest Street	North of Bolsa Avenue	Commercial	71.9	72.5	72.5	0.0	No
Goldenwest Street	South of Bolsa Avenue	Commercial	71.8	72.4	72.3	-0.1	No
Goldenwest Street	North of McFadden Avenue	Commercial	71.2	71.9	71.9	0.0	No

Table 4.5-2 Costco Future Roadway Noise Levels Off Site

Roadway	Segment	Existing Land Use	Noise Levels in dBA L_{dn}				
			Existing	Year 2030 with Previous Project	Year 2030 with Revised Project	Revised Project-Related Increase	Significance
Goldenwest Street	South of McFadden Avenue	Residential	71.1	71.8	71.8	0.0	No
Gothard Street	South of McFadden Avenue	Institutional/ Vacant	65.4	66.4	66.4	0.0	No
Gothard Street	North of Center Avenue	Institutional/ Commercial	65.2	66.0	66.1	0.1	No
Gothard Street	South of Center Avenue	Institutional/ Commercial	65.3	65.5	66.5	0.0	No
Beach Boulevard	North of Center Avenue	Commercial	74.2	75.0	75.0	0.0	No
Beach Boulevard	South of Center Avenue	Commercial	74.2	74.8	74.8	0.0	No
Goldenwest Street	North of Edinger Avenue	Commercial	70.4	71.0	71.0	0.0	No
Goldenwest Street	South of Edinger Avenue	Commercial	70.2	70.6	70.6	0.0	No
Gothard Street	North of Edinger Avenue	Commercial	66.0	66.4	66.4	0.0	No
Gothard Street	South of Edinger Avenue	Commercial	66.4	67.0	67.0	0.0	No
Beach Boulevard	North of Edinger Avenue	Commercial	74.5	75.2	75.2	0.0	No
Beach Boulevard	South of Edinger Avenue	Commercial	74.5	74.9	74.9	0.0	No
Newland Street	North of Edinger Avenue	Residential	67.9	69.0	69.0	0.0	No
Newland Street	South of Edinger Avenue	Residential	67.9	68.8	68.8	0.0	No
Gothard Street	North of Heil Avenue	Commercial	66.2	66.9	66.9	0.0	No
Gothard Street	South of Heil Avenue	Commercial	67.2	67.9	68.0	0.1	No
Beach Boulevard	North of Heil Avenue	Commercial	74.0	74.5	74.5	0.0	No
Beach Boulevard	South of Heil Avenue	Commercial	74.0	74.3	74.3	0.0	No
Newland Street	North of Heil Avenue	Residential	64.3	65.1	65.1	0.0	No
Newland Street	South of Heil Avenue	Residential	64.3	65.1	65.1	0.0	No
Gothard Street	North of Warner Avenue	Commercial/ Residential	67.2	67.9	67.9	0.0	No

Table 4.5-2 Costco Future Roadway Noise Levels Off Site

Roadway	Segment	Existing Land Use	Noise Levels in dBA L_{dn}				
			Existing	Year 2030 with Previous Project	Year 2030 with Revised Project	Revised Project-Related Increase	Significance
Gothard Street	South of Warner Avenue	Commercial	66.9	67.5	67.5	0.0	No
Beach Boulevard	North of Warner Avenue	Commercial	74.1	74.4	74.4	0.0	No
Beach Boulevard	South of Warner Avenue	Commercial	74.0	74.2	74.2	0.0	No
Newland Street	North of Warner Avenue	Commercial/ Residential	67.1	67.8	67.8	0.0	No
Newland Street	South of Warner Avenue	Commercial/ Residential	65.4	66.1	66.1	0.0	No
Beach Boulevard	North of McFadden Avenue	Commercial	73.9	74.7	74.7	0.0	No
Beach Boulevard	South of McFadden Avenue	Commercial	73.9	74.7	74.7	0.0	No
Beach Boulevard	North of Bolsa Avenue	Commercial/ Residential	74.0	74.8	74.8	0.0	No
Beach Boulevard	South of Bolsa Avenue	Commercial	74.0	74.7	74.7	0.0	No
Beach Boulevard	North of Hazard Avenue	Commercial/ Recreation	73.2	74.0	74.0	0.0	No
Beach Boulevard	South of Hazard Avenue	Commercial/ Recreation	73.1	73.9	73.9	0.0	No
Magnolia Street	North of Edinger Avenue	Residential	68.4	69.0	69.0	0.0	No
Magnolia Street	South of Edinger Avenue	Residential	68.4	69.1	69.1	0.0	No
Bolsa Avenue	West of Goldenwest Street	Commercial	69.2	70.3	70.3	0.0	No
Bolsa Avenue	East of Goldenwest Street	Commercial	70.2	71.5	71.5	0.0	No
McFadden Avenue	West of Goldenwest Street	Residential	67.3	67.5	67.5	0.0	No
McFadden Avenue	East of Goldenwest Street	Residential/ Commercial	68.2	68.4	68.4	0.0	No
McFadden Avenue	West of Gothard Street	Residential/ Institutional	68.4	68.5	68.5	0.0	No
McFadden Avenue	East of Gothard Street	Vacant/ Commercial	66.9	67.5	67.6	0.0	No
Center Avenue	West of Gothard Street	Institutional	54.6	56.0	56.0	0.0	No
Center Avenue	East of Gothard Street	Commercial	60.7	62.1	62.1	0.0	No

Table 4.5-2 Costco Future Roadway Noise Levels Off Site

Roadway	Segment	Existing Land Use	Noise Levels in dBA L_{dn}				
			Existing	Year 2030 with Previous Project	Year 2030 with Revised Project	Revised Project-Related Increase	Significance
Center Avenue	West of Beach Boulevard	Commercial	65.7	66.4	66.4	0.0	No
Edinger Avenue	West of Goldenwest Street	Commercial/ Residential	67.4	68.4	68.4	0.0	No
Edinger Avenue	East of Goldenwest Street	Institutional/ Commercial	67.7	68.6	68.6	0.0	No
Edinger Avenue	West of Gothard Street	Commercial	68.7	69.4	69.4	0.0	No
Edinger Avenue	East of Gothard Street	Commercial	68.8	69.5	69.5	0.0	No
Edinger Avenue	West of Beach Boulevard	Commercial	69.5	70.3	70.4	0.1	No
Edinger Avenue	East of Beach Boulevard	Commercial	68.5	69.1	69.1	0.0	No
Edinger Avenue	West of Newland Street	Residential	66.7	67.4	67.4	0.0	No
Edinger Avenue	East of Newland Street	Residential	67.0	67.9	67.9	0.0	No
Heil Avenue	West of Gothard Street	Commercial/ Residential	66.5	67.5	67.5	0.0	No
Heil Avenue	East of Gothard Street	Commercial	66.0	67.6	67.6	0.0	No
Heil Avenue	West of Beach Boulevard	Residential	65.1	66.9	66.9	0.0	No
Heil Avenue	East of Beach Boulevard	Commercial/ Residential	63.5	65.2	65.2	0.0	No
Heil Street	West of Newland Street	Residential	61.4	62.6	62.6	0.0	No
Heil Street	East of Newland Street	Residential	56.6	57.1	57.1	0.0	No
Warner Avenue	West of Gothard Street	Commercial/ Residential	71.3	71.8	71.8	0.0	No
Warner Avenue	East of Gothard Street	Commercial	70.7	71.2	71.2	0.0	No
Warner Avenue	West of Beach Boulevard	Commercial	71.4	71.8	71.8	0.0	No
Warner Avenue	East of Beach Boulevard	Commercial/ Residential	70.8	71.3	71.3	0.0	No
Warner Avenue	West of Newland Street	Commercial/ Residential	69.2	69.6	69.6	0.0	No
Warner Avenue	East of Newland Street	Commercial/ Residential	69.4	70.2	70.2	0.0	No

Table 4.5-2 Costco Future Roadway Noise Levels Off Site

Roadway	Segment	Existing Land Use	Noise Levels in dBA L_{dn}				
			Existing	Year 2030 with Previous Project	Year 2030 with Revised Project	Revised Project-Related Increase	Significance
McFadden Avenue	West of Beach Boulevard	Commercial/ Residential	67.2	67.7	67.7	0.0	No
McFadden Avenue	East of Beach Boulevard	Commercial	67.3	68.0	68.0	0.0	No
Bolsa Avenue	West of Beach Boulevard	Residential	67.5	69.0	69.0	0.0	No
Bolsa Avenue	East of Beach Boulevard	Commercial/ Residential	66.9	67.8	67.8	0.0	No
Hazard Avenue	West of Beach Boulevard	Commercial/ Recreation	66.8	66.7	66.7	0.0	No
Hazard Avenue	East of Beach Boulevard	Commercial/ Recreation	66.5	67.1	67.1	0.0	No
Edinger Avenue	West of Magnolia Street	Residential	67.3	68.0	68.0	0.0	No
Edinger Avenue	East of Magnolia Street	Residential	67.4	67.9	67.9	0.0	No

SOURCE: PBS&J 2008. Calculation data and results are provided in Appendix G.

NB = northbound, SB = southbound, WB = westbound, EB = eastbound

a. Cumulative Year 2030 without Project assumes buildout of the project site consistent with the current General Plan and Zoning designation

The previous EIR identified that the greatest cumulative increase in roadway noise levels would be 0.2 dBA at the intersection of McFadden Avenue and Goldenwest Boulevard, which would be substantially below the 3.0 dBA threshold established in the previous EIR. As identified above, the majority of the study roadway segments noise levels would not result in any change from that analyzed in the previous EIR. Two roadway segments would experience an increase in noise levels due to the revised project traffic volumes, at Gothard Street, north of Center Avenue, and Gothard Street, south of Heil Avenue. Noise in these areas are projected to increase by 0.1 dBA above the less-than-significant increase that was analyzed in the previous EIR, and therefore, the change in traffic volumes with the revised project would not result in a perceptible increase in roadway noise levels. As the revised project would not result in an increase in roadway noise levels above the 3.0 dBA identified threshold of significance, this impact would remain ***less than significant***, similar to the previous EIR.

Impact 4.5-4 Increased human activity associated with operation of the revised project would not cause a substantial permanent increase in ambient noise levels. This impact would remain *less than significant.*

As described in Chapter 2 (Project Description), the revised project includes a Costco in place of the mixed-use development that was previously analyzed on the northern portion of the project site. As described under Impact 4.5-1 (Operation), implementation of Costco would include two new substantial noise sources that were not evaluated in the previous EIR, the tire center and a 16-pump self-service gas station for Costco customer use. Once operational, these activities are not anticipated to have noise

levels greater than the established 60 dBA limit for areas zoned commercial. The closest sensitive receptor during operation of the revised project would be the future residential uses associated with the revised project in the southern portion of the site and the RedOak/Amstar project, located approximately 50 feet west of the project site, with the associated residential uses located an additional 185 feet from the Costco building.

The proposed tire center and gas station will be along the eastern perimeter of the Costco building and shielded from the RedOak/Amstar residential uses by the Costco building. As such, the occupants of the RedOak/Amstar project would not be exposed to noise generated from operation of the tire center or the gas station. As described under Impact 4.5-1 above, noise exposure from the tire center and the gas station at the nearest on-site residential unit was calculated to be below the City of Huntington Beach standard for residential exteriors. Additionally, the peak tire center noise occurs in short bursts with intervening periods of quiet. Such intermittent peaks are reached for only brief cumulative periods in any one hour. Fueling operations are not substantial noise generators. Except for late night truck deliveries of fuel, no potential noise conflict is likely to occur. However, single event noise from possible nocturnal fuel deliveries would typically be similar to peak noise events from existing sources (car horns, motorcycles, sirens, aircraft, etc.). Therefore, operational noise associated with the tire center and the fueling station would not result in a permanent increase in ambient noise levels and impacts would not be considered substantial. Impacts would remain ***less than significant***, similar to the previous EIR.

As shown in Figure 3-4 (Revised Conceptual Master Plan), the Costco building would be oriented in such a way that the side of the building would be facing the RedOak/Amstar site, with the exception of the loading area. The revised project would be required to comply with the City of Huntington Beach General Plan Noise Element Policy N 1.4.2, which mandates that loading and shipping facilities of commercial and industrial land uses abutting residential parcels be located and designed to minimize the potential noise impacts upon residential parcels. Deliveries that would occur for the mixed-use portion of the project would be less intensive in nature than the Costco daily deliveries and would likely occur during normal business hours for the retail establishments. The delivery area for the retail portion of the mixed use component would also comply with the Policy N 1.4.2 and would be screened from sensitive receptors both on site and off site by intervening structures and design of the loading spaces. Furthermore, deliveries to the mixed-use development on-site were addressed in the previous EIR. As previously stated, noise from loading activities would be below the City of Huntington Beach exterior standards for residential uses; therefore, this impact would remain ***less than significant***, similar to the previous EIR.

The revised project would result in an increase in surface parking within the project site than was analyzed in the previous EIR. Surface parking lots can be a source of annoyance due to automobile engine start-ups and acceleration, and the activation of car alarms. Parking lots can generate single impact L_{eq} noise levels of between 49 dBA L_{eq} (tire squeals) and 74 dBA L_{eq} (car alarms) at 50 feet. Due to the high level of traffic noise along streets surrounding the project site (ranging from 67.4 dBA along Center Avenue to 68.7 dBA along Edinger Avenue), normal daytime surface parking lot L_{eq} noise would not likely be audible due to the masking of noise by traffic on nearby roadways. Therefore, noise impacts relating to on-site parking would remain ***less than significant***, similar to the previous EIR.

Threshold	Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Impact 4.5-5 **Construction activities associated with the revised project would result in additional substantial temporary or periodic increases in ambient noise levels. Implementation of Mitigation Measures MM4.5-1 and MM4.5-2 would reduce this impact, but not to levels of less than significant. Therefore, this impact would remain *significant and unavoidable*, similar to the previous EIR.**

Development of the revised project would involve a construction scenario similar to the scenario that was previously analyzed. Construction activities occurring within the project site would involve demolition, grading, and excavation activities, followed by construction and external finishing of the proposed facilities and associated parking areas, as well as roadway and landscaping improvements. These activities would involve the use of heavy equipment, including pile-driving activities. Construction activities would also involve the use of smaller power tools, generators, and other equipment that generate noise. Each stage of construction would use a different mix of equipment, and noise levels would vary based on the amount and type of equipment in operation and the location of the activity related to potential receptors.

Under Section 8.40.090(d) (Special Provisions) of Chapter 8.40 of the City's Municipal Code, noise sources associated with construction are exempt from the requirements of the Municipal Code, provided that construction activities do not occur between the hours of 8:00 P.M. and 7:00 A.M. on weekdays, including Saturday, or at any time on Sunday or a federal holiday. Additionally, mitigation measures MM4.5-1 and MM4.5-2 have been identified to reduce construction related noise levels to the extent feasible. Noise levels during pile driving activities could reach up to 91 dBA at the residential uses of the Old World Village located approximately 285 feet north of the revised project, similar to the previously analyzed project. The construction contractor would be required to implement noise attenuation measures during pile driving activities, including but not limited to the utilization of noise blankets, which would reduce noise levels up to 10 dBA. However, pile-driving activities would occur for approximately 35 days for construction of the Costco site, and, therefore, this temporary increase in ambient noise levels would be noticeable and would likely be cause for human annoyance as was identified in the previous EIR. Implementation of the above mentioned mitigation measures would reduce the noise levels associated with pile driving activities, but not to a level of less than significant. Therefore, construction related temporary increases in ambient noise levels would remain ***significant and unavoidable***, similar to the previous EIR.

4.5.4 Cumulative Impacts

A cumulative impact analysis is only provided for those thresholds that result in a less-than-significant or significant and unavoidable impact. A cumulative impact analysis is not provided for Effects Found Not to Be Significant, which result in no project-related impacts.

The geographic context for the analysis of cumulative noise impacts depends on the impact being analyzed. For construction impacts, only the immediate area around the project site would be included in the cumulative context. For operational/roadway related impacts, the context is build-out of the City of Huntington Beach General Plan, including existing and future development of cumulative projects within the City of Huntington Beach, as well as adjacent communities that would be potentially impacted. Noise is by definition a localized phenomenon, and significantly reduces in magnitude as distance from the source increases. Consequently, only projects and growth due to occur in the Huntington Beach area would be likely to contribute to cumulative noise impacts.

Under Section 8.40.090(d) (Special Provisions) of Chapter 8.40 of the City's Municipal Code, noise sources associated with construction are exempt from the requirements of the Municipal Code, provided that construction activities do not occur between the hours of 8:00 P.M. and 7:00 A.M. on weekdays, including Saturday, or at any time on Sunday or a federal holiday. Because compliance with this construction time limit is required by the Huntington Beach Municipal Code, the revised project and all other cumulative development would be exempt, and the cumulative impact associated with construction noise in the Huntington Beach area would be considered less than significant. Similarly, because construction-related noise generated under the revised project would be exempt from established noise standards, the cumulative impact of the project would remain ***less than significant***.

With regards to stationary sources, noise would be generated by sources at the revised project site and other projects in the vicinity, including the operation of The RedOak/Amstar project. The major stationary source of noise that will be introduced into the Huntington Beach area would likely be HVAC equipment located on the rooftops of new developments. Because shielding would be required for all development associated with the revised project, noise levels from individual stationary sources would not exceed the applicable City noise standard, and because this shielding would be expected to be installed on all new development in the Huntington Beach area, it is expected that all rooftop stationary sources in the project area would similarly generate ***less-than-significant*** noise levels.

Parking lots can generate L_{eq} noise levels of between 49 dBA L_{eq} (tire squeals) to 74 dBA L_{eq} (car alarms) at 50 feet. Due to the high level of traffic noise along streets surrounding the project site, normal daytime parking structure L_{eq} noise would not likely be audible due to the masking of noise by traffic on nearby roadways. Due to distance from sensitive receptors, it is unlikely that noise from multiple related projects would interact to create a significant combined noise impact from parking lots.

Construction of the revised project would produce additional temporary vibration impacts that would be less than significant, as noted above. Cumulative development in the Huntington Beach area, including The RedOak/Amstar project is not considered likely to result in the exposure of on-site or off-site receptors to excessive groundborne vibration, due to the localized nature of vibration impacts, the fact that all construction would not occur at the same time and at the same location, and the largely built-out nature of the City, which would usually preclude the use of heavy equipment such as bulldozers. Aside from The RedOak/Amstar project, no other projects are proposed in close enough proximity to affect the same receptors as the revised project. Construction activities associated with the RedOak/Amstar, which is adjacent to the proposed project, are anticipated to overlap with construction activities for the revised project for some amount of time, and sensitive uses on or in the immediate vicinity of the revised

project site may be exposed to two sources of ground-borne vibration simultaneously. However, for the combined vibration impact from the two projects to reach cumulatively significant levels, heavy construction activity from both projects would have to occur simultaneously within 50 feet of any receptor. Because buildings associated with the proposed project would not be within 50 feet of buildings associated with revised project, it is not likely that heavy construction activity from both projects would simultaneously occur at distances of 50 feet or less from the same receptor. Therefore, vibration from future development could not combine with construction vibration of the proposed project to result in a significant cumulative impact. The contribution of the revised project to such an impact would not be cumulatively considerable because the proposed project would include mitigation to reduce the project's impact, and the cumulative impact of the project would be ***less than significant***.

Cumulative noise impacts would occur primarily as a result of increased traffic on local roadways due to the revised project and other projects within the project area. Therefore, cumulative traffic-generated noise impacts have been assessed based on the contribution of the revised project to the future cumulative base traffic volumes in the project vicinity. The noise levels associated with cumulative base traffic volumes without the project, and cumulative base traffic volumes with the project are identified in Table 5.5-1. Noise level increases would reach a maximum of 0.1 dBA L_{dn} above the less-than-significant increase that was analyzed in the previous EIR at two of the study roadway segments in the project vicinity, and therefore, the change in traffic volumes with the revised project would not result in a perceptible increase in roadway noise levels. The contribution of the revised project would range from 0 dBA to 0.1 dBA across all intersections studied, which is less than the 0.2 dBA increase identified in the previous EIR. No study roadway segments would increase by 3.0 dBA L_{dn}. The 0 dBA to 0.1 dBA contribution of the revised project to future roadway noise levels would not exceed the identified thresholds of significance and, therefore, would not be cumulatively considerable. Further, noise levels generated from operation of the revised project are not anticipated to be above the established 3.0 dBA thresholds, as the site is planned for mixed-use residential and retail uses, which do not generate as much noise as industrial developments.

Periodic and temporary noise levels would be generated by construction of the revised project along with other cumulative development in the vicinity. However, construction noise impacts are localized in nature and decrease substantially with distance; consequently, in order to achieve a substantial cumulative increase in construction noise levels, more than one source emitting high levels of construction noise would need to be in close proximity to a noise receptor. Pile driving activities would last for approximately 35 days for the Costco portion of the revised project, and therefore, this temporary increase in ambient noise levels would be noticeable and would likely be cause for human annoyance. As the construction activities associated with the Costco portion of the revised project alone would impose a significant temporary increase in ambient noise levels that could combine with the effects of cumulative development, the revised project's contribution to the impact would be cumulatively considerable; therefore, the cumulative impact of the project's construction-related temporary increases in ambient noise levels would remain ***significant and unavoidable***, similar to the previous EIR.

4.5.5 Comparison of Impact Conclusions

All impact conclusions for the revised project remain the same as those identified in the previous EIR. The revised project would result in a slight change in traffic volumes along adjacent roadways; however, the change in traffic volumes would not result in an increase in roadway noise levels above the 3.0 dBA threshold of significance. Noise levels at sensitive receptors would not increase beyond what was identified previously. Overall, implementation of the revised project would not result in new noise impacts that were not previously analyzed or increase the severity of previously identified impacts. No new mitigation measures would be required.

The comparison of anticipated environmental impacts of the revised project with those identified for the previous project supports the required CEQA findings below. Specifically, none of the conditions set forth in Section 15162 of the 2010 CEQA Guidelines that would require preparation of a supplemental EIR has been met:

- The revised project would not result in new significant impacts to noise, nor is there a substantial increase in the severity of impacts from that identified in the previous EIR.
- There is no information in the record or otherwise available that indicates there are substantial changes in circumstances pertaining to noise that would require major revisions to the previous EIR.
- There is no substantial new information that would result in a new significant impact to noise requiring major revisions of the previous EIR.
- There are no alternatives to the previous project or additional mitigation measures that would substantially reduce one of more significant impacts pertaining to noise identified in and considered in the previous EIR.

4.5.6 References

Austin-Foust Associates. 2008. *Bella Terra Traffic Impact Analysis*. May 21.

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Giroux and Associates. 2010. *Noise Impact Analysis, Huntington Beach Costco, Huntington Beach, California*. May20.

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Hendriks, R. 1998. *Technical Noise Supplement: A Technical Supplement to the Traffic Noise Analysis Protocol.* California Department of Transportation (Caltrans), Sacramento, California. October.

Huntington Beach, City of. 1996b. *General Plan.* Prepared by Envicom Corporation, 13 May.

United States Department of Transportation. Federal Railroad Administration. 2005. *High-Speed Ground Transportation Noise and Vibration Impact Assessment*. October

United States Environmental Protection Agency. 1971. *Noise from Construction Equipment and Operations, Building Equipment and Home Appliances*.

4.6 TRANSPORTATION/TRAFFIC

This section analyzes the potential for adverse impacts on existing transportation and traffic conditions resulting from implementation of the revised project. Impacts relating to increased hazards due to design features; parking capacity; changes in air traffic patterns as a result of the revised project; provision of emergency access; and, the potential for the project to conflict with adopted policies supporting alternative transportation and emergency access would not change as a result of the revised project. The impact conclusions from the previous EIR are briefly summarized in this section although no new analysis is presented.

Baseline conditions with respect to vehicle trips and roadway volumes in the vicinity of the project site remain substantially the same as when the previous EIR was certified in 2008. Data used to prepare this section were taken from the City's General Plan Circulation Element and *The Bella Terra Expansion Supplemental Traffic Study* prepared by Austin-Foust Associates for the project site (Appendix F). Full bibliographic entries for all reference materials are provided in Section 4.6.5 (References), at the end of this section.

4.6.1 Environmental Setting

The environmental setting of the project site and surrounding area has not changed with respect to existing conditions in and around the project study area, including the existing street and highway system, traffic volumes on these facilities, and operating conditions at selected intersections as described in Section 4.13.1 of the previous EIR (pages 4.13-1 through 4.13-10).

4.6.2 Regulatory Framework

The regulatory framework as described in Section 4.13.2 of the previous EIR (pages 4.13-10 through 4.13-15) has not changed.

4.6.3 Project Impacts and Mitigation

Analytic Method

The analysis in this section focuses on the nature and magnitude of the change in transportation and traffic patterns due to implementation of the revised project. The revised project comprises a 154,113-square-foot (sf) Costco with tire center, an associated sixteen pump gas station (available only to Costco members), and a mixed-use development consisting of 468 residential units and 30,000 sf of general retail uses. The previous EIR evaluated the potential effects of a higher intensity mixed-use project. As such, this analysis recognizes that The Village will be part of the overall Bella Terra retail center, sharing access roads, and to some extent parking (however, residential spaces will be specially designated). With respect to traffic-related issues, the primary difference between the previous and revised projects is the demolition of the 91,153 sf existing Mervyns retail structure and the construction and operation of a

Costco. Unless stated otherwise, the term "revised project" in this analysis refers to the potential effects associated with construction and operation of the Costco and ancillary uses.

The previous EIR evaluated the then-proposed project as well as two options, referred to as Option 1 and Option 2. Option 2 was determined to represent the worst-case scenario in terms of traffic-related impacts. Specifically, Option 2 included development of 538 residential units and 181,118 sf of commercial space and 165-room hotel, as evaluated in the previous EIR. The trip generation analysis recognizes that the revised project (Costco plus mixed-use development) will be part of the overall Bella Terra retail center, sharing access roads, and to some extent parking (although residential spaces will be specially designated). This analysis provides a detailed analysis of the trip generation characteristics of the revised project.

For the revised project (refer to Table 4.6-2 [Project Trip Generation Summary]), the traffic analysis compares the change in local roadway conditions with implementation of the Costco project from that evaluated in the previous EIR. Therefore, in order to present a reasonable worst-case analysis, the traffic analysis of the revised project reflects the traffic volumes anticipated with implementation of the increase in retail and gas station operation and the reduction in residential uses from that previously analyzed, in accordance with Sections 15151 and 15164 of the CEQA Guidelines (which sets forth the standards of adequacy of analysis in an EIR and the requirements of an addendum to an EIR, respectively).

Intersection Analysis

The intersection capacity utilization (ICU) values and Caltrans intersections established for the study area have not changed from the previous EIR. ICU values are used to determine levels of service at study area intersection locations and provide a means to quantitatively estimate incremental traffic impacts. To calculate the ICU value for an intersection, the volume of traffic using the intersection is compared with the capacity of the intersection. The ICU is usually expressed as a decimal percent (e.g., 0.86). The decimal percent represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity. The ICU-based Level of Service (LOS) is defined below in Table 4.6-1 (ICU Level of Service).

Table 4.6-1 ICU Level of Service

Level of Service	*Intersection Capacity Utilization (ICU) Value*
A	0–0.60
B	0.61–0.70
C	0.71–0.80
D	0.81–0.90
E	0.91–1.00
F	> 1.00

SOURCE: Orange County Congestion Management Plan. November, 2003.

For Caltrans intersections (such as those along Beach Boulevard), the delay-based methodology contained in the Transportation Research Board's *Highway Capacity Manual* (HCM) is also used. This

methodology estimates the average total delay for each of the traffic movements and determines the LOS for each movement. The overall average delay is measured in seconds per vehicle, and LOS is then calculated for the entire intersection. The HCM-based LOS is defined below in Table 4.6-2 (Definitions of Level of Service for Intersections).

Table 4.6-2 Definitions of Levels of Service for Intersections

Level of Service (LOS)	Control Delay (in sec/vehicle)	
	Signalized Intersection*	Unsignalized Intersection
A	0–10	0–10
B	10.1–20	10.1–15
C	20.1–35	15.1–25
D	35.1–55	25.1–35
E	55.1–80	35.1–50
F	80.1 or more	50.1 or more

* Delay criteria from *Highway Capacity Manual* (HCM), Transportation Research Board, Washington D.C., 1997.

The definitions of level of service for uninterrupted flow (flow unrestrained by the existence of traffic control devices) are:

- **LOS A** represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream.
- **LOS B** is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver.
- **LOS C** is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes slightly affected by interactions with others in the traffic stream.
- **LOS D** represents high-density but stable flow. Speed and freedom to maneuver are severely restricted, and the driver experiences a generally poor level of comfort and convenience.
- **LOS E** represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Small increases in flow will cause breakdowns in traffic movement.
- **LOS F** is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations.

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The City of Huntington Beach Traffic Study Guidelines (1996) considers LOS D acceptable for intersections located within the City limits. Additionally, an intersection is impacted if the existing LOS is E or F and the ICU value changes by 0.01 or more.

Project Traffic

The traffic related to the project has been calculated in accordance with the following accepted procedural steps:

- Trip Generation
- Trip Distribution

These steps are described in detail below:

Project Trip Generation

Trip generation represents the amount of traffic attracted to and produced by a development. Basic trip generation rates for the revised project's land uses were taken from the Institute of Transportation Engineers' (ITE) *Trip Generation* manual as well as nationwide surveys conducted by Kittleson and Associates for the Costco store. The data from the Kittleson surveys include substantially more samples and detailed data than information in the ITE Trip Generation Manual. It should be noted that this information also supports the use of a higher trip generation rates than ITE data. In order to accurately assess the revised projects trip generation, there are three potential adjustments to the basic trip generation derived from "stand alone" trip generation rates.

- On-site capture
- Pass-by trips
- Diverted trips

For on-site trip capture, a special analysis was conducted in the previous traffic study, addressing residential uses adjacent to a large retail complex. For the proposed retail expansion, the ITE equation based rates account for interaction among retail uses. However, because of the special nature of the Costco, a stand-alone trip generation rate has been used and then an estimated local capture applied.

Pass-by trips represent trips from patrons that are already on roadways adjacent to the site and merely turn off the roadway to access the site, and then return to their normal trip when their visit is completed. Pass-by trips only include those trips from streets with direct access to the site. Going to the particular site is generally not the primary reason the motorist is making the trip. Pass-by trips can be estimated by modeling or by directly incorporating some form of trip reduction into the trip generation using guidelines such as published by ITE. As with trip generation, data for Costco for pass-by trips were obtained from the Kittleson report rather than the ITE studies. The trip generation reduction (as a percentage) is a function of the size of the project, with larger projects having a lower pass-by percentage (i.e., they tend to be more of a primary destination than smaller entities). The pass-by percentages also vary by time of day, day of week and volume of traffic on the immediately adjacent roadways.

Diverted traffic is similar to a pass-by trip in some respects, except that the patron is traveling on a nearby roadway that does not have direct access to the site. The motorist would make a slight detour on the normal trip in order to visit the site. This detour can vary from a few hundred feet to a mile or more. Diverted traffic is more intangible and is best estimated by modeling. Experience with modeling large generators has demonstrated the validity of diverted trips, although the trip patterns involved tend to be

somewhat complex, and will differ for different roadways surrounding the project. In some cases, traffic diversion associated with a project can actually add to rather than reduce an impact (e.g., a diverted trip becomes a turn movement rather than a through movement at an intersection). Simply reducing the trip generation for the project will seldom adequately account for what actually happens on the surrounding roadway network.

The revised project trip generation, along with the trip generation estimates from the previous EIR, is summarized in Table 4.6-3 (Project Trip Generation Summary). As shown, future development of the revised project would generate more PM peak hour trips, and fewer AM peak hour and daily trips, than trips generated under Option 2 of the previous project. Trip rates used for the Costco store were based on empirical data from nationwide surveys. The reduction in AM peak hour trips occurs because Costco stores do not open until after the AM peak hour. The revised project would generate approximately 6,060 new daily trips, of which 332 trips are anticipated during the AM peak hour and 655 trips are anticipated during the PM peak hour. As shown in Table 4.6-3, the revised project would result in 858 fewer daily trips than was estimated for the previous project (Option 2), including 53 fewer AM peak hour trips and 27 more PM peak hour trips. It should be noted that the revised project trip generation included an adjustment for the demolition of the existing Mervyns building as this use was in operation at the time the analysis for the previous EIR was prepared.

Table 4.6-3 Project Trip Generation Summary

		Peak Hour						
		AM			PM			
Project Description	*Amount*	*In*	*Out*	*Total*	*In*	*Out*	*Total*	*ADT*
Existing (Bella Terra Mall [Phase I])								
Existing Commercial	694,422 sf	306	195	501	1,080	1,169	2,249	23,933
Internal Capture		—	—	—	(65)	(70)	(135)	(957)
Pass-by Reduction		—	—	—	(216)	(234)	(450)	(4,787)
Subtotal		*306*	*195*	*501*	*799*	*865*	*1,664*	*18,189*
Multiplex Theatres with Matinee	76,740 sf	0	0	0	297	263	560	3,067
Internal Capture		—	—	—	(60)	(53)	(113)	(889)
Subtotal		*0*	*0*	*0*	*237*	*210*	*447*	*2,178*
Existing Trip Generation Total		***306***	***195***	***501***	***1,036***	***1,075***	***2,111***	***20,367***
Mervyns Store Closure[d]	***91,153 sf***	***(40)***	***(26)***	***(66)***	***(105)***	***(113)***	***(218)***	***(2,388)***
Previous Project (The Village at Bella Terra—Option 2)								
Bella Terra Residential	538 du	54	221	275	215	118	333	3,615
Bella Terra Hotel	165 rooms	56	36	92	51	46	97	1,348
Bella Terra Commercial	181,118 sf	45	29	74	178	194	372	3,890
Internal Capture		(11)	(11)	(22)	(43)	(43)	(86)	(1,012)
Local Capture		(4)	(15)	(19)	(9)	(5)	(14)	(145)
Pass-by Reduction		(9)	(6)	(15)	(35)	(39)	(74)	(778)
Option 2 Project Trip Generation Total		***131***	***254***	***385***	***357***	***271***	***628***	***6,918***

Table 4.6-3 Project Trip Generation Summary

Project Description	Amount	Peak Hour						ADT
		AM			PM			
		In	Out	Total	In	Out	Total	
Revised Project								
Bella Terra Residential[a]	468 du	47	192	239	187	103	290	2,991
Bella Terra Commercial[b]	30,000 sf	13	9	22	50	54	104	1,068
Costco Store[c]	154,113 sf	97	82	179	518	558	1,076	11,691
Mervyns Store Closure[d]	91,153 sf	(40)	(26)	(66)	(105)	(113)	(218)	(2,388)
Residential Internal Capture (residential end)[e]		(2)	(8)	(10)	(24)	(14)	(38)	(837)
Residential Internal Capture (commercial end)[e]		(8)	(2)	(10)	(14)	(24)	(38)	(837)
Local Capture (residential)[f]		(3)	(13)	(16)	(7)	(4)	(11)	(120)
Costco Internal Capture (Costco end)[g]		—	—	—	(26)	(28)	(54)	(585)
Costco Internal Capture (Non-Costco end)[g]		—	—	—	(28)	(26)	(54)	(585)
Pass-by Reduction (Commercial)[h]		(3)	(3)	(6)	(12)	(12)	(24)	(246)
Pass-by Reduction (Costco)[i]		—	—	—	(182)	(196)	(378)	(4,092
Revised Project Trip Generation Total		***101***	***231***	***332***	***357***	***298***	***655***	***6,060***
Revised Project vs. Previous Project		***(30)***	***(23)***	***(53)***	***0***	***27***	***27***	***(858)***
Percent Increase		-22.9%	-9.1%	-13.8%	0.0%	10.0%	4.3%	-12.4%
Trip Rates								
Residential (ITE 220)	du	.100	.410	.510	.400	.220	.620	6.720
Shopping Center (633,269 sf)	sf	.440	.283	.723	1.661	1.799	3.460	35.595

SOURCE: Austin-Foust Associates, Inc. City of Huntington Beach *The Bella Terra Expansion Supplemental Traffic Study*. June 2010. pp. 4 and 5.

ADT = average daily traffic; du =- dwelling unit; sf = square feet

a. Trips based on ITE (8th Ed.) Apartment (220) rates.
b. Based on ITE (8th Ed.) Shopping Center trip generation equation rates for 633,269 SF.
c. Daily & PM peak hour trips based on data provided by Kittleson Associates, and AM rates derived as discussed in *The Bella Terra Expansion Supplemental Traffic Study*.
d. Trips based on ITE (7th Ed.) Shopping Center (820) equation using total site commercial of 694,422 SF. Net trips (after internal and pass-by discounts) were then factored for 91,153 SF.
e. Based on residential trip generation capture of 4 percent for AM Peak Hour, 13 percent for PM Peak Hour and 14 percent for ADT
f. Based on residential local trip capture of 7 percent for AM Peak Hour, 4 percent for PM Peak Hour and 4 percent for ADT.
g. Based on 5 percent internal capture for PM and ADT (zero for AM).
h. Based on ITE (8th Ed.) equation for Shopping Center (820) pass-by trips.
i. Based on 35 percent for PM Peak Hour and ADT. The AM pass-by discount is included in the basic trip generation.

Project Trip Distribution

The trip distribution and assignment process represents the directional orientation of traffic to and from the project site. Trip distribution is influenced by existing travel patterns, the geographic location of the site, the location of residential areas, commercial and recreational opportunities, and the proximity of the regional freeway system. The trip generation results from the previous section showed that for the revised project, the PM peak hour is higher than previously, due to higher outbound trips, and the AM peak hour is lower. In addition, some redistribution of trips to the project driveways is estimated to occur

under the revised site plan. Hence, for the immediate area, revised volumes have been prepared for the AM and PM peak hours to show the effect of this redistribution and the change in trip generation. Figure 4.6-1 (Revised Project Trip Distribution) compares the trip distribution for the revised project to that used in the previous EIR.

Thresholds of Significance

The following thresholds of significance are based on Appendix G of the 2010 CEQA Guidelines. Therefore, for the purposes of this addendum, implementation of the revised project may result in a potentially significant impact if it would cause any of the following results:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (e.g., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in locations that results in substantial safety risks
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses
- Result in inadequate emergency access
- Result in inadequate parking capacity
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)

As described above, for the purposes of this analysis, an acceptable level of service is LOS D as defined by City of Huntington Beach Circulation Element. Therefore, any intersection operating at LOS E or F is considered deficient/unsatisfactory. In addition, an intersection is also considered impacted if the existing LOS is E or F and the ICU value changes by 0.01 or more as a result of the project.

Revised Impacts and Mitigation

Threshold	Would the proposed project cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (e.g., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?

Impact 5.6-1 **Construction of the revised project would not cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system. This impact is *less than significant*, similar to the previous project.**

Construction activities associated with development under the revised project would generally involve five stages: (1) abatement and demolition, (2) excavation and shoring, (3) trenching, (4) construction (which includes pile driving and building and parking construction), and (5) final coating along with landscaping improvements and paving activities. Construction is anticipated to be conducted in two stages. Stage 1 includes demolition and the construction of Phase 1 (the Costco development), and Stage 2 includes the construction of Phases 2 through 4 (the residential and additional retail development). Construction of Stages 1 and 2 would be substantially independent of one another. For a conservative analysis it was assumed that construction of Phase 1 would begin in 2010 with Phases 2 through 4 beginning within a month of completion of Phase 1. Construction of the mixed-use component would occur in a similar manner as was evaluated in the previous EIR.

Construction traffic generally occurs prior to the peak period, consistent with the typical construction workday of 7:00 A.M. to 3:00 P.M. Several arterial roadways in the project vicinity are designated truck routes in the City's General Plan Circulation Element. Specifically, Edinger Avenue, Goldenwest Street, and Bolsa Avenue are designated truck routes and are easily accessible from the project site. Access to the I-405 freeway is available from Center Avenue, adjacent to and north of the project site. Easy access to the regional freeway system would eliminate truck traffic on the surrounding arterial streets. Truck trips could occur along designated truck routes north and south of the project site to I-405. Due to the relatively minor number of truck trips associated with construction of the revised project compared to the previous project and due to the temporary nature of construction activities, truck trips due to import/export activities at the project site would not be anticipated to cause a substantial increase in traffic volumes or delays in the project area over what was previously analyzed. As such, construction-related traffic impacts related to the revised project would be ***less than significant***, similar to the previous EIR. No mitigation measures are required.

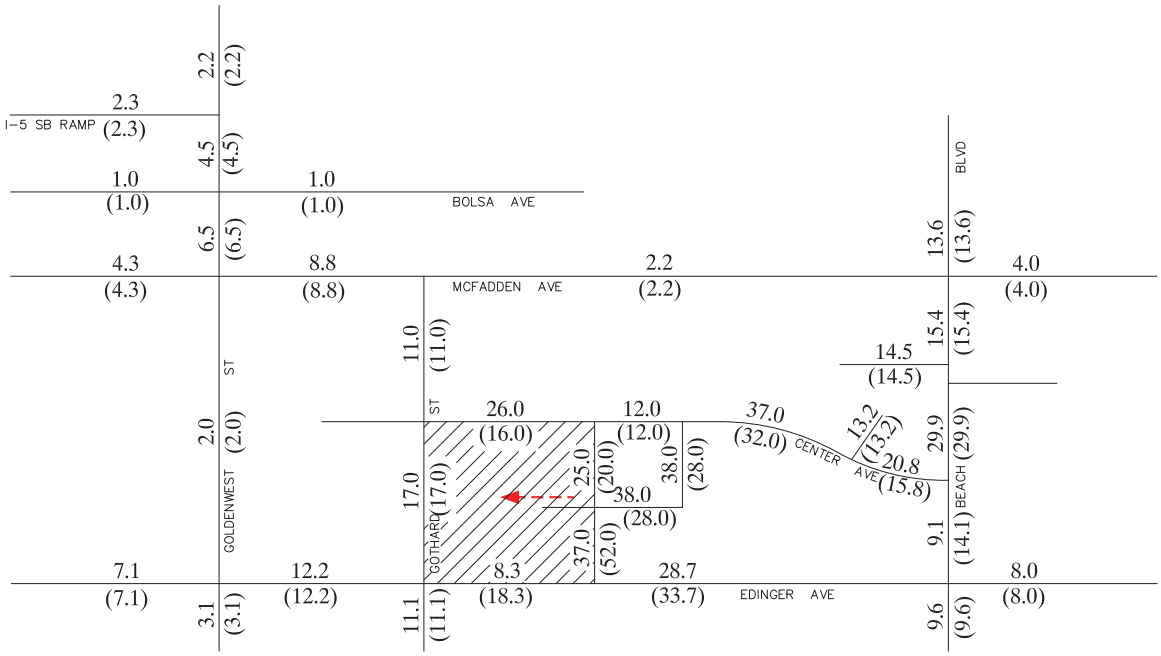
Impact 5.6-2 **Under Year 2014 conditions, operation of revised project would not cause a substantial increase in traffic beyond that which was previously analyzed. However, because the revised project would result in an increase in traffic similar to the previous project, which is substantial in relation to the forecasted traffic load and capacity of the street system, this impact would remain *significant and unavoidable*, similar to the previous project.**

As shown in Table 4.6-3, development of the revised project is estimated to generate a total of approximately 6,060 average trips per day. During the AM peak hour the project is estimated to generate approximately 332 vehicles per hour, while during the PM peak hour the project is projected to generate approximately 655 vehicles per hour. This would result in 858 fewer daily trips than was estimated for the previous project (Option 2), including 53 fewer AM peak hour trips and 27 more PM peak hour trips.

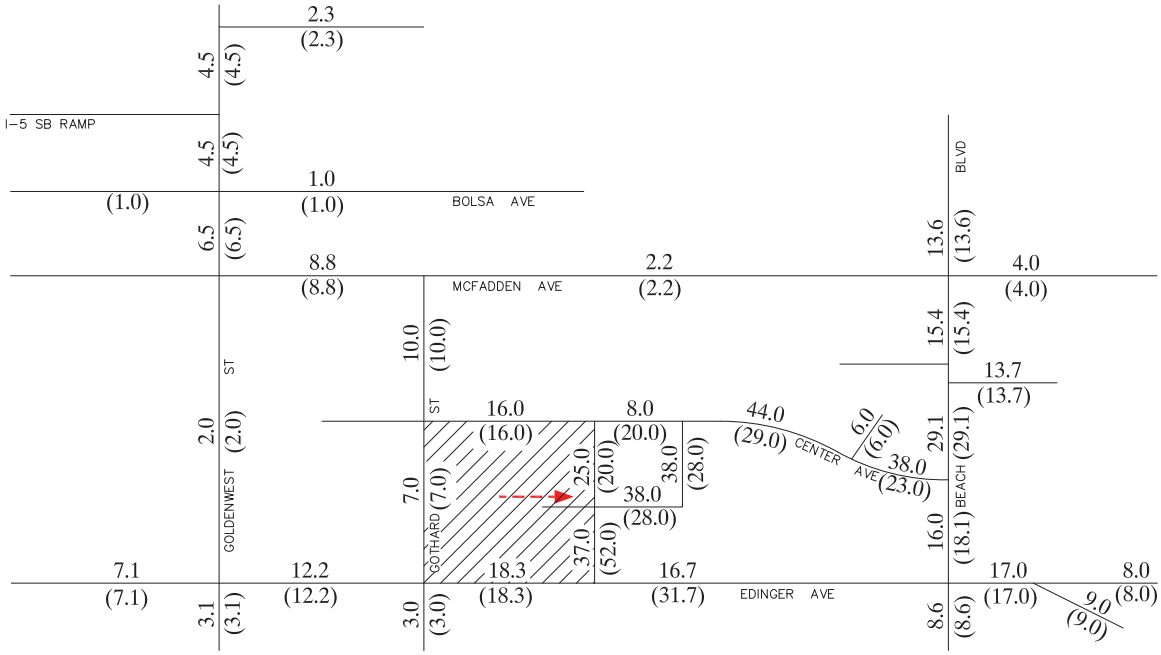
Intersection Analysis

Operation of revised project under 2014 conditions could result in an increase in traffic beyond existing conditions, though not substantially more than was previously analyzed. As with the previous EIR, a project impact is defined as a change in ICU of 0.01 or greater, where deficient traffic operations are projected to occur (i.e., LOS E or F).

INBOUND



OUTBOUND



Legend

X.X Alternative Project
(Y.Y) Previous Project

NORTH
NOT TO SCALE

***Source*:** Austin-Foust Associates, Inc., 2010.

FIGURE **4.6-1**

Revised Project Trip Distribution

Table 4.6-4 (2014 Intersection Level of Service Summary) summarizes the 2014 ICU values for the revised project and provides a comparison against the ICU values from the previous EIR. The ICU values are provided for the AM and PM peak hour for the adjacent intersections, and the PM peak hour only for the off-site intersections. For all but two intersections (two adjacent intersections), the change in ICU was found to be less than 1 percent.

For the intersection of I-405 Southbound Ramps at Center Avenue, the PM ICU shows an increase of 0.01. However, this is not significant as the intersection is forecast to operate at an acceptable LOS D (ICU less than 0.91), similar to the previous EIR.

Table 4.6-4 2014 Intersection Level of Service Summary

Intersection	*Previous Project (Option 2)*		*Revised Project*		*Difference*	
	AM ICU	*PM ICU*	*AM ICU*	*PM ICU*	*AM ICU*	*PM ICU*
Adjacent Intersections						
Gothard Street & Center Avenue	0.32	0.53	0.31	.53	-.01	.00
I-405 SB Ramps & Center Avenue	0.45	0.80	0.45	.81	.00	.01
Beach Boulevard & Center Avenue	0.71	0.72	0.71	.72	.00	.00
Gothard Street & Edinger Avenue	0.50	0.60	0.49	.60	-.01	.00
Beach Boulevard & Edinger Avenue	0.74	0.95	0.77	.96	.03	.01
	Previous Project (Option 2)		*Revised Project*		*Difference*	
Off-Site Intersections (PM Peak Hour Only)						
Goldenwest Avenue & Bolsa Avenue	0.91		0.91		0.00	
Goldenwest Avenue & McFadden Avenue	0.76		0.76		0.00	
Gothard Street & McFadden Avenue	0.55		0.55		0.00	
Goldenwest Avenue & Edinger Avenue	0.65		0.65		0.00	
Newland Street & Edinger Avenue	0.70		0.70		0.00	
Gothard Street & Heil Avenue	0.68		0.68		0.00	
Beach Boulevard & Heil Avenue	0.82		0.82		0.00	
Newland Street & Heil Avenue	0.51		0.51		0.00	
Gothard Street & Warner Avenue	0.80		0.80		0.00	
Beach Boulevard & Warner Avenue	0.92		0.92		0.00	
Newland Street & Warner Avenue	0.87		0.87		0.00	
Beach Boulevard & McFadden Avenue	0.85		0.85		0.00	
Beach Boulevard & Bolsa Avenue	0.87		0.87		0.00	
Beach Boulevard & Hazard Avenue	0.74		0.74		0.00	
Magnolia Street & Edinger Avenue	0.71		0.71		0.00	

SOURCE: Austin-Foust Associates, Inc., *City of Huntington Beach The Bella Terra Expansion Supplemental Traffic Study*, June 2010, p. 9.

The intersection of Beach Boulevard at Edinger Avenue shows ICU increases of 0.03 and 0.01 for the AM and PM peak hours, respectively, compared to the previous project. This results in LOS C for the

AM peak hour and LOS E for the PM peak hour. The AM LOS is acceptable, whereas the PM LOS does not satisfy the performance standard. The previous EIR identified a mitigation measure (previously MM4.13-1) for this intersection, which would still be applicable for the revised project. MM4.6-1 would require the project applicant to contribute funds on a fair share basis for the provision of a third westbound through lane or a fourth northbound through lane.

MM4.6-1 *The Applicant shall provide funds on a fair share basis to the City of Huntington Beach to construct either an additional northbound through lane or an additional westbound through lane at the intersection of Beach Boulevard and Edinger Avenue.*

Only one of the identified improvements in mitigation measure MM5.6-1 would be required to reduce 2014 traffic at the intersection to a less-than-significant level. Although the intersection would still operate at an LOS of E, the ICU value at this intersection would be identical to the ICU projected to occur at the intersection in 2014 without the project. As such, potential impacts to the local street system would be less than significant with MM5.6-1, similar to that identified in the previous EIR.

Regional Freeway System Analysis

As identified in the previous EIR, future development was projected to result in a deficiency at the I-405 northbound on-ramp from Beach Boulevard. In addition, an analysis was also conducted in the previous EIR for the freeway weave sections which carry some project traffic, the freeway mainline sections in the vicinity of the project site, as well as the Beach Boulevard collector-distributor (CD) roads. The revised project would also contribute traffic to deficiencies on I-405 (in both 2014 and 2030). In the absence of specific significance criteria from Caltrans, the addition of traffic to a projected deficiency would result in a ***significant and unavoidable*** impact, similar to the previous EIR.

Summary

The increase in PM traffic at Beach Boulevard and Edinger Avenue as a result of the revised project would not result in a substantial increase over that previously evaluated. The same impact conclusions and mitigation measures that were identified in the previous EIR would still apply. With the implementation of mitigation measure MM5.6-1, the revised project's impact to traffic load and capacity of study area intersections from operation of future development would be reduced to a less-than-significant level. However, because implementation of the revised project would contribute to projected regional freeway deficiencies in 2014, this is considered an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system. Therefore, under 2014 conditions, this impact is considered ***significant and unavoidable***, similar to the previous project.

Impact 5.6-3 **Under Year 2030 Conditions, operation of revised project would not cause a substantial increase in traffic beyond that which was analyzed in the previous EIR. However, because the revised project would result in the same increase in traffic, which is substantial in relation to the forecasted traffic load and capacity of the street system, this impact would remain *significant and unavoidable*, similar to the previous project.**

As shown in Table 4.6-3, future development of the revised project is estimated to generate a total of approximately 6,060 average trips per day. During the AM peak hour the project is estimated to generate approximately 332 vehicles per hour, while during the PM peak hour the project is estimated to generate approximately 655 vehicles per hour. This would result in 858 fewer daily trips than was estimated for the previous project (Option 2), including 53 fewer AM peak hour trips and 27 more PM peak hour trips.

Intersection Analysis

Table 4.6-5 (2030 Intersection Level of Service Summary) summarizes the 2030 ICU values for the revised project and provides a comparison against the ICU values from the previous EIR. For all but one intersection (Beach Boulevard at Edinger Avenue in the AM peak hour), the change in ICU was found to be less than one percent. The intersection of Beach Boulevard and Edinger Avenue shows an ICU increase of 0.03 for the AM peak hour with development of the revised project. This results in LOS D for the AM peak hour, which meets the performance standard (LOS D). Therefore, even though the revised project results in slightly more trips at this intersection in the AM peak hour compared to the previous project, the increase is not considered substantial.

The previous project was shown to have a long-range (2030) significant impact at the intersection of Beach Boulevard and Edinger Avenue during the PM peak hour. In order to reduce that impact to a less-than-significant level, the previous EIR determined that the Applicant would be required to contribute towards at least one of the improvements identified in mitigation measure MM5.6-1. Although the revised project would not increase the severity of this previously identified impact, implementation of the same mitigation would still be required.

Regional Freeway System Analysis

As identified in the previous EIR, future development is projected to result in a deficiency at the I-405 northbound on-ramp from Beach Boulevard. In addition, an analysis was conducted in the previous EIR for the freeway weave sections that carry some project traffic, the freeway mainline sections in the vicinity of the project site, as well as the Beach Boulevard collector-distributor (CD) roads. The revised project would also contribute traffic to deficiencies on I-405 (in both 2014 and 2030). In the absence of specific significance criteria from Caltrans, the addition of traffic to a projected deficiency would remain ***significant and unavoidable***, similar to the previous EIR.

Table 4.6-5 2030 Intersection Level of Service Summary

Intersection	Previous Project (Option 2)		Revised Project		Difference	
	AM ICU	PM ICU	AM ICU	PM ICU	AM ICU	PM ICU
Adjacent Intersections						
Gothard Street & Center Avenue	.36	.57	.36	.57	.00	.00
I-405 SB Ramps & Center Avenue	.55	.90	.55	.90	.00	.00
Beach Boulevard & Center Avenue	.78	.77	.78	.77	.00	.00
Gothard Street & Edinger Avenue	.55	.64	.55	.64	.00	.00
Beach Boulevard & Edinger Avenue	.86	1.05	.89	1.05	.03	.00
Off-Site Intersections (PM Peak Hour Only)						
	Previous Project (Option 2)		Revised Project		Difference	
Goldenwest Avenue & Bolsa Avenue	1.02		1.02		.00	
Goldenwest Avenue & McFadden Avenue	.81		.81		.00	
Gothard Street & McFadden Avenue	.64		.64		.00	
Goldenwest Avenue & Edinger Avenue	.70		.70		.00	
Newland Street & Edinger Avenue	.80		.80		.00	
Gothard Street & Heil Avenue	.78		.78		.00	
Beach Boulevard & Heil Avenue	.95		.95		.00	
Newland Street & Heil Avenue	.63		.63		.00	
Gothard Street & Warner Avenue	.84		.84		.00	
Beach Boulevard & Warner Avenue	.96		.96		.00	
Newland Street & Warner Avenue	.92		.92		.00	
Beach Boulevard & McFadden Avenue	.95		.95		.00	
Beach Boulevard & Bolsa Avenue	1.05		1.05		.00	
Beach Boulevard & Hazard Avenue	.83		.83		.00	
Magnolia Street & Edinger Avenue	.78		.78		.00	

SOURCE: Austin-Foust Associates, Inc. City of Huntington Beach *The Bella Terra Expansion Supplemental Traffic Study*. June 2010. pg. 11

Summary

Implementation of the revised project would result in a slightly higher AM peak hour ICU at Beach Boulevard and Edinger Avenue than was previously evaluated. However, the ICU increase of 0.03 is not considered substantial. The same impact conclusions and mitigation measures that were identified in the previous EIR would still apply. With implementation of mitigation measure MM5.6-1, which would involve the construction of an additional northbound through lane along Beach Boulevard at Edinger Avenue or an additional westbound through lane on Edinger Avenue at Beach Boulevard, the long-term (2030) traffic intersection impacts generated by operation of the revised project (as identified in the previous EIR) would be less than significant. However, because implementation of the revised project would contribute to projected regional freeway deficiencies in 2030, similar to the previous project, this is considered an increase in traffic which is substantial in relation to the existing traffic load and capacity of

the street system. Therefore, under 2030 conditions, this impact is considered ***significant and unavoidable***, similar to the previous EIR.

Threshold	Would the proposed project exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?

Impact 5.6-4 **Implementation of revised project would not exceed standards established by the Orange County Transportation Authority. This impact would remain *less than significant*, similar to the previous project.**

The Orange County Transportation Authority (OCTA) is designated as the Congestion Management Agency (CMA) to oversee the Orange County Congestion Management Plan (CMP). The CMP Highway System (HS) includes specific roadways, which include State Highways and Smart Streets (formerly Super Streets), and CMP arterial monitoring locations/intersections. Two CMP intersections are located in the study area: (1) Beach Boulevard at Edinger Avenue and (2) Beach Boulevard at Warner Avenue. CMP-designated intersections have a performance standard of LOS E or better (intersection capacity utilization (ICU) not to exceed 1.00), and a project is considered to have a significant impact if it contributes 0.01 or more to an ICU when the performance standard is exceeded.

As identified in Table 4.6-4, 2014 ICU values for the revised project show ICU values of 0.77 and 0.96 (AM and PM peak hours, respectively) for the intersection of Beach Boulevard and Edinger Avenue, and a PM peak ICU value of 0.92 for the intersection of Beach Boulevard and Warner Avenue (AM peak trips are reduced with implementation of the revised project, and would therefore result in lower ICU values for the AM hours). Neither CMP intersection shows ICU values that exceed the allowable CMP threshold of 1.00. Therefore, the revised project would not result in significant CMP impacts. This impact would remain ***less than significant***, similar to the previous EIR.

Threshold	Would the proposed project result in a change in air traffic patterns, including either an increase in traffic levels or a change in locations that results in substantial safety risks?

Impact 5.6-5 **Implementation of the revised project would not result in a change in air traffic patterns. This impact would remain *less than significant*, similar to the previous project.**

The project site is not located within two miles of a public or private use airport, and is not located within any airport land use plan or flight path. Additionally, with development of the revised project, the ten-story residential or hotel tower and associated helipad is no longer being contemplated as a part of the project, as was previously proposed. As such, potential impacts to air traffic patterns would remain ***less than significant***, similar to the previous EIR.

Threshold	Would the proposed project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses?

Impact 5.6-6 **Implementation of the revised project would not substantially increase roadway hazards. This impact would remain *less than significant,* similar to the previous project.**

For the purposes of this analysis, hazards are defined as changes to circulation patterns that could result in unsafe driving or pedestrian conditions. Examples include inadequate vision or stopping distance, sharp roadway curves where there is an inability to see oncoming traffic, or vehicular/pedestrian traffic conflicts. As noted previously, the revised project would result in development of a 154,113 sf Costco, including an ancillary tire sales and gas station, as well a mixed-use development consisting of up to 468 residential units and 30,000 of commercial retail uses in an area currently developed with vacant commercial uses. Due to the type of uses proposed, the revised project is not anticipated to result in design features that would be considered incompatible with current circulation patterns.

Access to the project site would continue to be provided along Edinger Avenue and Center Avenue. Internal circulation within the project site would be provided primarily by two drive aisles on the western and eastern borders, traversing the site from north to south. The lane traversing the western border of the project site would also double as an emergency access lane and would be constructed in accordance with applicable code requirements. East/west access ways would be provided within the surface parking areas fronting Center Avenue and Edinger Avenue.

The Union Pacific Rail Road (UPRR) right-of-way is located directly adjacent to the project site to the west. Development of the revised project would reduce the residential uses contemplated under the previous EIR (713 du compared to 468 du) and the potential for conflicts between future residents and/or visitors to the site and the adjacent railroad right-of-way would continue to be reduced through the incorporation of several site design features. For example, along the western boundary of the project site (adjacent to the fire lane), perimeter screening trees and a retaining wall would deter access towards the UPRR right-of-way. Therefore, project-related impacts are considered ***less than significant*** with regards to hazards resulting from design features or incompatible uses, similar to the previous EIR.

However, the potential for roadway hazards can also occur as an inherent result of the placement of additional access points along public roadways and as a result of increased vehicle traffic at those access points. New intersections require adequate sight distance and intersection traffic control in order to minimize potential hazards. In order to ensure the safe construction of project intersections, the revised project would adhere to the following code requirements that were identified in the previous EIR (previously CR4.13-1 and CR4.13-2):

CR4.6-1 *On-site traffic signing and striping shall be implemented in conjunction with detailed construction plans for the project site.*

CR4.6-2 *Sight distance at each project access shall be reviewed with respect to standard City of Huntington Beach sight distance standards at the time of preparation of final grading, landscape and street improvement plans.*

As part of standard development procedures, plans would be submitted to the City for review and approval, which would ensure that the revised would not result in roadway hazards. Therefore, adherence to code requirements CR4.6-1 and CR4.6-2 as well as standard site plan review would ensure that potential impacts to roadway hazards remain ***less than significant***, similar to the previous EIR.

Threshold	Would implementation of the proposed project result in inadequate emergency access?

Impact 5.6-7 **Implementation of the revised project would not result in inadequate emergency access. This impact is *less than significant*.**

Access to the project site under the revised project would be provided from Edinger Avenue and Center Avenue, both of which are primary arterial streets. An emergency access lane accessed from either thoroughfare would be located along the western boundary of the project site. As part of standard development procedures, plans would be submitted to the City for review and approval to ensure that all new development has adequate emergency access, including turning radius, in compliance with existing regulations. Therefore, traffic generated under the revised project would not impede emergency access to and from adjacent and surrounding roadways. A ***less-than-significant*** impact would occur, especially after compliance with existing regulations, similar to the previous EIR.

Threshold	Would the proposed project result in inadequate parking capacity?

Impact 5.6-8 **Implementation of the revised project would not result in inadequate parking capacity. This impact is *less than significant*.**

According to Specific Plan No. 13 (SP-13), the parking requirements for the proposed regional commercial uses and big box commercial uses will be based on a shared parking study using divergent peak times of parking demands. The Costco portion of the revised project will utilize some of the parking spaces in the existing parking structure and the remainder would be provided via surface parking.

An approximately 700-space, five-level parking structure would be provided for future residents, which would be located at the back of the Costco, surrounded on three sides by the residential portion of the proposed mixed-uses. Parking stalls would be provided in the southern portion of the site for the mixed-uses through a mix of surface and structured parking.

Therefore, because the revised project would provide adequate parking on-site, this impact would remain ***less than significant***, and no mitigation is required, similar to the previous EIR.

Threshold	Would the proposed project conflict with adopted policies supporting alternative transportation (e.g., bus turnouts, bicycle racks)?

Impact 5.6-9 **Implementation of the revised project would not conflict with adopted policies supporting alternative transportation. This impact is *less than significant*.**

The revised project would result in the development of a Costco store and associated tire center and gas station on the northern portion of the site while reducing the number of dwelling units and commercial square footage of mixed-uses previously proposed on the southern portion. Although the reduction in mixed-uses compared to the previous project would likely reduce the overall walkability that was previously envisioned for the site, the revised project would not conflict with any identified policies supporting alternative transportation. Easy access to commercial uses would still be provided to future residents and the nearby Golden West Transit Center would continue to provide a convenient location for residential trips to be made elsewhere by transit. Additionally, a future pedestrian connection is still required by SP-13 at the western boundary of the site, across the UPRR tracks, to eventually provide a link to future development on the previous Levitz site.

This impact would remain ***less than significant***, similar to the previous EIR. No mitigation measures are required.

4.6.4 Cumulative Impacts

Cumulative impacts under the revised project would remain substantially similar to the previous project. Although 27 additional PM peak hour trips would be added as a result of the revised project, the revised project would result in 858 fewer daily trips than was estimated previously. The increased PM peak hour trips would not result in any additional impacts or a substantial increase in the severity of previously identified impacts. Consequently, the cumulative scenario for traffic impacts would be the same, if not reduced, for the revised project. The revised project would result in the same significant traffic impacts as the previous project and would result in similar contributions to the significant cumulative impacts. Because the revised project would also contribute traffic to projected freeway deficiencies, similar to the previous project, the increase is considered substantial in relation to the forecasted traffic load and capacity of the street system and this cumulative impact would remain significant and unavoidable. All other cumulative traffic impacts, including hazardous design features, emergency access, parking, and alternative transportation would remain the same as previously identified. The revised project would be required to implement the same mitigation measures as were previously proposed. The additional contribution of the revised project would not be considered cumulatively considerable for any of these impacts, and cumulative impacts would remain less than significant.

4.6.5 Comparison of Impact Conclusions

A comparison of the revised project with the previous project is detailed individually for each potential impact in the discussions of traffic impacts provided above. Implementation of the revised project would result in the demolition of the existing Mervyns store, the reduction in residential uses by 70 dwelling

units and the elimination of the 165-room hotel that was analyzed for Option 2 in the previous EIR and the development of a Costco store with a sixteen-pump gas station and tire center. The primary difference between the previous and revised project with respect to traffic is that development of a Costco in place of the previously analyzed project on site would result in 858 fewer daily trips than was estimated for the previous project (Option 2), including 53 fewer AM peak hour trips and 27 more PM peak hour trips. Although the introduction of 27 more trips in the PM peak hour would be incrementally greater, the ICU values would not substantially increase such that previously identified impacts would be made worse. All impact conclusions that were identified in the previous EIR would remain and no new impacts would occur as a result of the revised project. In addition, no new mitigation measures are required beyond those identified in the previous EIR.

The comparison of anticipated environmental impacts of the revised project with those identified for the previous project supports the required CEQA findings below. Specifically, none of the conditions set forth in Section 15162 of the 2010 CEQA Guidelines that would require preparation of a supplemental EIR has been met:

- The revised project would not result in new significant impacts to traffic or transportation, nor is there a substantial increase in the severity of impacts from that identified in the previous EIR.
- There is no information in the record or otherwise available that indicates there are substantial changes in circumstances pertaining to traffic or transportation that would require major revisions to the previous EIR.
- There is no substantial new information that would result in a new significant impact to traffic or transportation requiring major revisions of the previous EIR.
- There are no alternatives to the previous project or additional mitigation measures that would substantially reduce one of more significant impacts pertaining to traffic or transportation identified in and considered in the previous EIR.

4.6.6 References

Austin-Foust Associates, Inc. 2010. *The Bella Terra Expansion Supplemental Traffic Study*, June.

———. 2008. *The Village at Bella Terra Traffic Study*, May.

California Department of Transportation (Caltrans). 2002. *Statewide Transit-Oriented Development Study*, September.

Huntington Beach, City of. 1996. Circulation Element. *Huntington Beach General Plan*, May 13.

CHAPTER 5 Report Preparers

This EIR was prepared by PBS&J, under contract to the City of Huntington Beach. Assisting PBS&J in this task was one subconsultant (Austin Foust Associates—Traffic Engineering) and staff members from the City of Huntington Beach. The following agencies and persons were directly involved in the preparation of this EIR.

It is recognized that no one individual can be an expert in all of the environmental analysis presented in this EIR. Consequently, an interdisciplinary team, consisting of technicians and experts in various issue areas, was required to prepare and complete this study. Table 5-1 provides a list of EIR preparers.

Table 5-1 List of EIR Preparers

Name	*Issue Area/Role*
LEAD AGENCY: CITY OF HUNTINGTON BEACH	
Mary Beth Broeren	Planning Manager
Jane James	Senior Planner
EIR CONSULTANT TEAM: PBS&J	
Carrie Garlett	Project Manager, Technical Review
TJ Nathan	Project Manager, Technical Analysis for Aesthetics
Jessie Barkley	Technical analysis for Land Use and Planning
Julian Capata	Technical Analysis for Transportation/Traffic and Noise
Heather Dubois	Technical analysis for Air Quality
Allison Wax	Technical Analysis for Hazards and Hazardous Materials
Joel Miller	Document Production
EIR SUBCONSULTANT TEAM	
Austin Foust Associates	Traffic Engineering